

Washington State Department of Transportation  
Fish Passage Barrier Removal Program

Washington State Department of Fish and Wildlife  
Technical Applications Division

Progress Performance Report  
For  
WSDOT Fish Passage Inventory

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*May 2003*



**Washington Department of  
Fish and Wildlife**

*TECHNICAL APPLICATIONS DIVISION*

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*FISH PASSAGE BARRIER REMOVAL PROGRAM*

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## Introduction

Restoration of declining salmon and trout populations ranks high in the in the development of management plans for streams, lakes, and wetlands in Washington State. One of the major problems facing the salmon and trout populations are facing is an inability to migrate into usable stream habitat due to barrier culverts at stream crossing. Washington State Recognizing this, the Washington Department of Fish and Wildlife (WDFW) and the Washington Department of Transportation (WSDOT) have worked since 1991 to inventory and correct fish barriers at state highway crossings.

Prior to 1991, WSDOT addressed fish passage barriers as required by hydraulics permits issued for highway construction projects and through routine maintenance. In 1991, in cooperation with the Washington State Legislative Transportation Committee, WSDOT committed funding from its Highway Construction Program to develop an inventory of fish passage barriers (to anadromous fish species) at state highway crossings. WSDOT contracted with Washington Department of Fisheries (prior to the merger of Washington Departments of Fisheries and Wildlife) to conduct the inventory and habitat studies necessary to prioritize state route barriers for correction.

Normally, barrier culverts can be corrected cost effectively. To date, WSDOT has spent more than \$13.8 million to inventory, conduct habitat studies, prioritize, and correct fish passage barriers in Washington streams. The inventory applies a scientific approach to prioritizing WSDOT fish passage barrier correction and measuring the quantity of reclaimed habitat. Under this program, more than 1,593,467 square meters of salmonid habitat, or, over 357 linear kilometers (222 miles) once blocked by barrier culverts has been reclaimed.

Fish passage inventory updates, including results of fish passage reviews for upcoming WSDOT road projects, and the WSDOT barrier correction plan are discussed in this report. WSDOT barrier corrections completed in 2002, long-term scoping and planning for future barrier corrections, and fish use evaluations of planned and completed fish passage barrier corrections are also reported.

## Fish Passage Inventory

In 1998, the WSDOT contracted with the WDFW to commence an expanded inventory using the current fish passage criteria (*WDFW Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual 1998* revised in 2000). The current fish passage criteria have been expanded to include stream reaches with gradients up to 20% (in accordance with the Forest Practice Rules) that were not evaluated during the initial fish passage inventory (1992-1998). The expanded inventory is prioritized by Water Resource Inventory Areas (WRIA), using WSDOT road miles, estimated barriers to fix, stock status, stock mobility, and the number of native salmonid species present in each WRIA.

To date, the expanded inventory has been completed on 3,442 kilometers (2,139 miles) of state routes, or 28% of the total WSDOT highway system. Figure 1 shows the WRIsAs where the expanded inventory has been completed. The road-based, WSDOT fish passage inventory is expected to be completed within the next five to eight years, depending on the availability of inventory funding. Habitat assessment and prioritization for all fish passage barriers are expected to be completed within ten to twelve years.

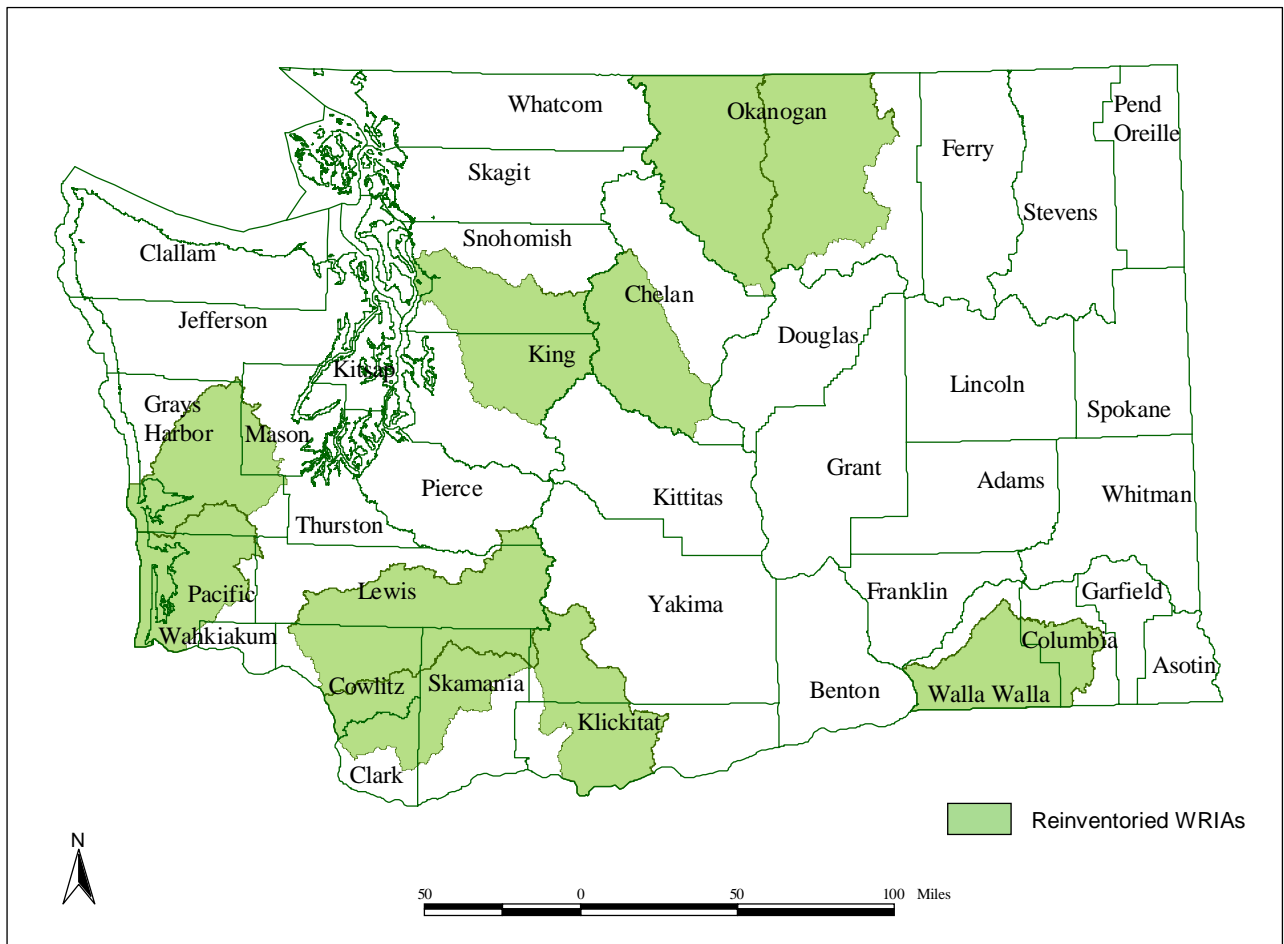


Figure 1. Reinventoried WRIs using the WSDOT Expanded Fish Passage Inventory.

The results and estimates for the expanded WSDOT fish passage inventory are shown in Table 1. The numbers within the WDFW Fish Passage Database include all data collected to date for the entire WSDOT fish passage inventory (January 1992 - March 2003). The expansion numbers estimate the number of fish barriers for the entire 12,324 kilometers (7,658 miles) of WSDOT road system, once the WSDOT fish passage inventory is completed.

Table 1. Estimated Number of Fish Bearing Crossings, Fish Barrier Crossings, and Barrier Crossings Requiring Fish Passage Repair based on the WSDOT Expanded Inventory Fish Passage Protocol.

Source	Fish Crossings	Fish Barriers	Barriers Requiring Repair	Barriers with Limited Habitat Gain <sup>1</sup>	Repair Status Not Determined	Barriers Fixed <sup>2</sup>
WDFW 2003 database	2,297	959	610	195	154	<b>96</b>
Extrapolated data <sup>3</sup>	3,982	2,436	1,429	387		

<sup>1</sup> Barriers that do not meet our current threshold habitat gain criteria to justify correction using dedicated funding.

<sup>2</sup> Ninety-six WSDOT fish passage barriers have been fixed since 1991; however 19 of those require additional work to meet current fish passage criteria (see Appendix II)

<sup>3</sup> The expected number of barriers to be identified during the expanded inventory is a result of updated WDFW SSHEAR site and barrier evaluation methods. The site evaluation methods were updated to comply with new habitat assessment criteria outlined in the 1998 Emergency Forest Practice Rules.

### Fish Passage Inventory Upgrades

During the ongoing WSDOT inventory, 3,913 crossings in natural drainages have been inspected; 2,297 have been identified as fish bearing. Approximately 42% (959) of the examined fish bearing crossings were identified as barriers (Table 1). Sixty-four percent of those barriers (610), having significant habitat gain have been prioritized for near-term correction, while 195 barriers with limited habitat gain will be considered for correction once the high priority barriers are corrected, or they be may be corrected during road or maintenance projects.

For each WSDOT fish passage barrier identified, a habitat assessment is conducted to establish priorities for fish passage restoration. Three methods of habitat assessment are used; Full Physical Surveys, Threshold Determinations (TD), and Expanded Threshold Determinations (ETD), per the *WDFW Fish Passage Barrier and Surface Water Diversion Screening Assessment and Prioritization Manual* (August 2000, located on the Internet at: <http://www.wa.gov/wdfw/hab/engineer/habeng.htm>). The Full Physical Survey and ETD are used to qualify and quantify habitat, while the TD verifies a significant reach of habitat (200 m) exists both downstream and upstream of a barrier culvert crossing.

Based on results of surveys completed to date, 610 barriers have sufficient habitat gains to justify correction. Another 154 fish barrier crossings are scheduled for further evaluation, to determine status for fish passage repair. A complete list of all the WSDOT-owned fish passage structures is included in Appendix I.



## **Regional Statistics**

WSDOT has six geographic management regions: Northwest, North Central, Olympic, Southwest, South Central, and Eastern (See Figure 2).

In the Northwest Region, WDFW has identified 298 barriers, of which 178 have been prioritized for near-term repair, while 67 barriers with a limited habitat gain will be considered for correction during road or maintenance projects or once the correction of all high priority barriers have been completed. Twenty-nine barriers have been repaired and 73 barriers will require further assessment to determine their repair status (See Figure 3). Eighteen percent of this region has been reinventoried.

In the North Central Region, WDFW has identified 73 barriers, of which 55 have been prioritized for near-term repair, while 10 barriers with a limited habitat gain will be considered for correction during road or maintenance projects or once the correction of all high priority barriers have been completed. Eight barriers have been repaired and 8 barriers will require further assessment to determine their repair status (See Figure 4). Forty-two percent of this region has been reinventoried.

In the Olympic Region, WDFW has identified 276 barriers, of which 178 have been prioritized for near-term repair, while 50 barriers with a limited habitat gain will be considered for correction during road or maintenance projects or once the correction of all high priority barriers have been completed. Thirty-seven barriers have been repaired and 48 barriers will require further assessment to determine their repair status (See Figure 5). Fifteen percent of this region has been reinventoried.

In the Southwest Region, WDFW has identified 250 barriers, of which 180 have been prioritized for near-term repair, while 59 barriers with a limited habitat gain will be considered for correction during road or maintenance projects or once the correction of all high priority barriers have been completed. Seventeen barriers have been repaired and 11 barriers will require further assessment to determine their repair status (See Figure 6). Sixty-two percent of this region has been reinventoried.

In the South Central Region, WDFW has identified 27 barriers, of which 15 have been prioritized for near-term repair, while 3 barriers with a limited habitat gain will be considered for correction during road or maintenance projects or once the correction of all high priority barriers have been completed. One barrier has been repaired and 9 barriers will require further assessment to determine their repair status (See Figure 7). Eleven percent of this region has been reinventoried.

In the Eastern Region, WDFW has identified 35 barriers, of which 24 have been prioritized for near-term repair, while 6 barriers with a limited habitat gain will be considered for correction during road or maintenance projects or once the correction of all high priority barriers have been completed. Four barriers have been repaired and 5 barriers will require further assessment to determine their repair status (See Figure 8). No reinventory has been conducted in this region.



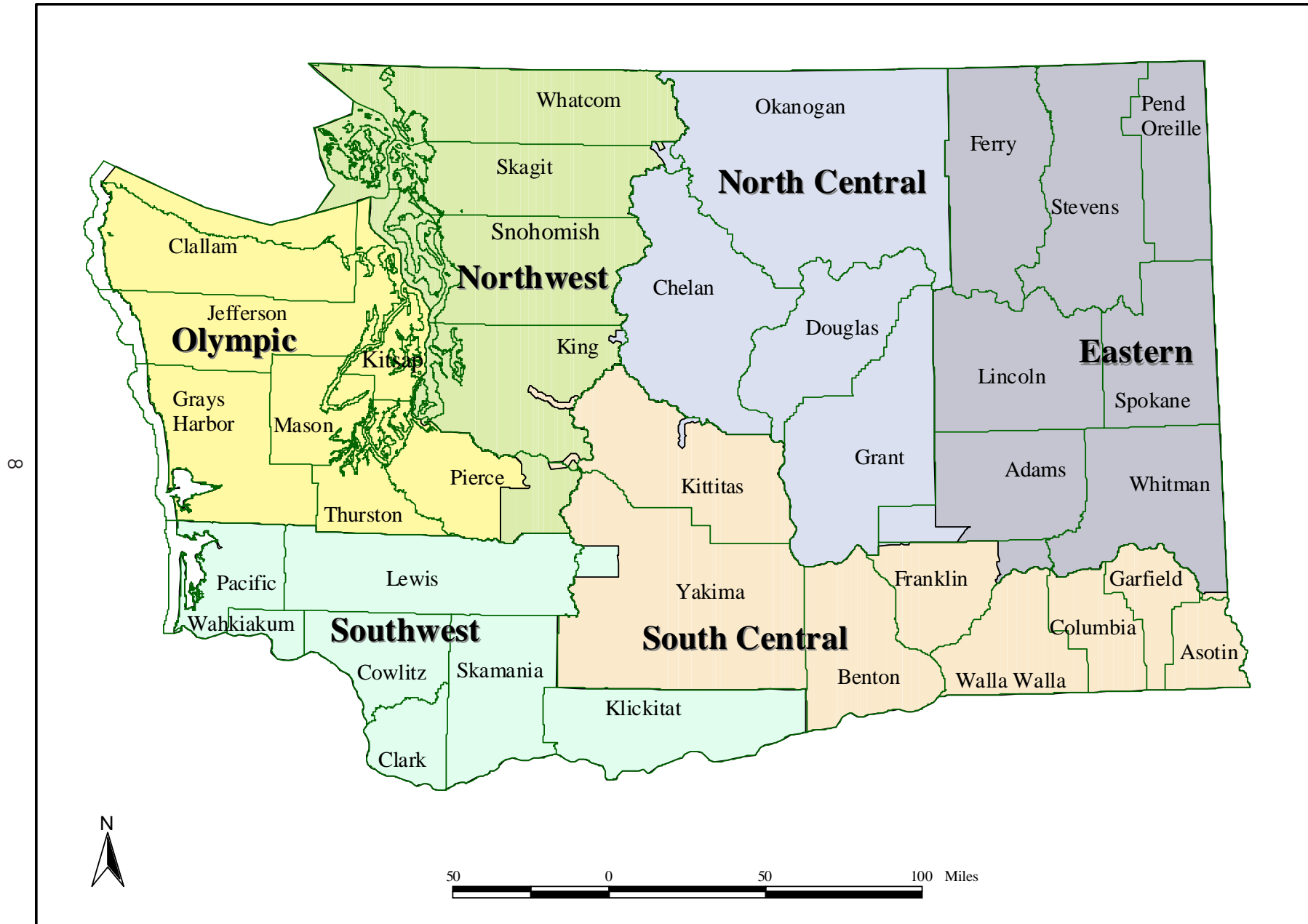


Figure 2. WSDOT Regions.

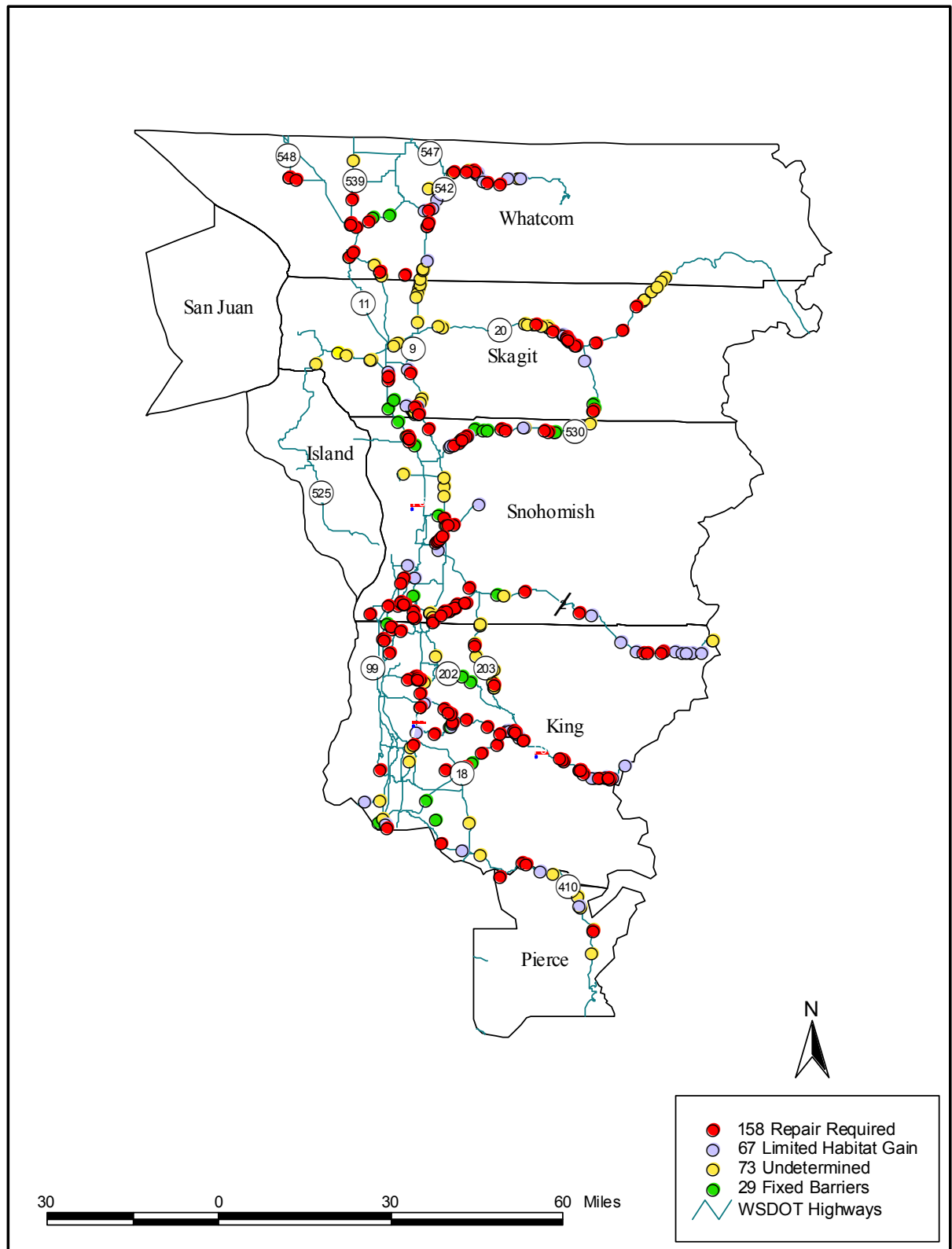


Figure 3. WSDOT Northwest Region Fish Barriers, March 2003

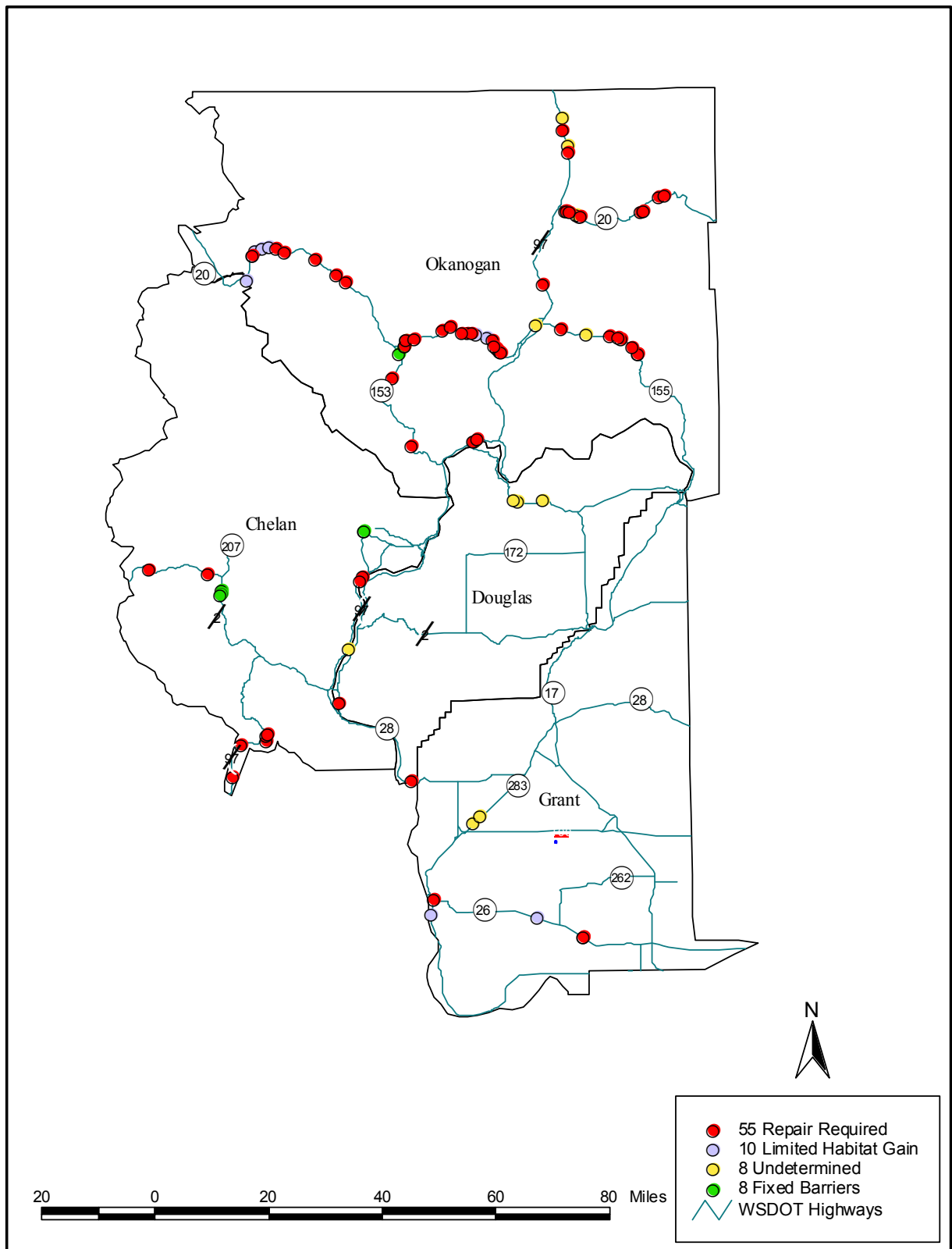


Figure 4. WSDOT North Central Region Fish Barriers, March 2003.

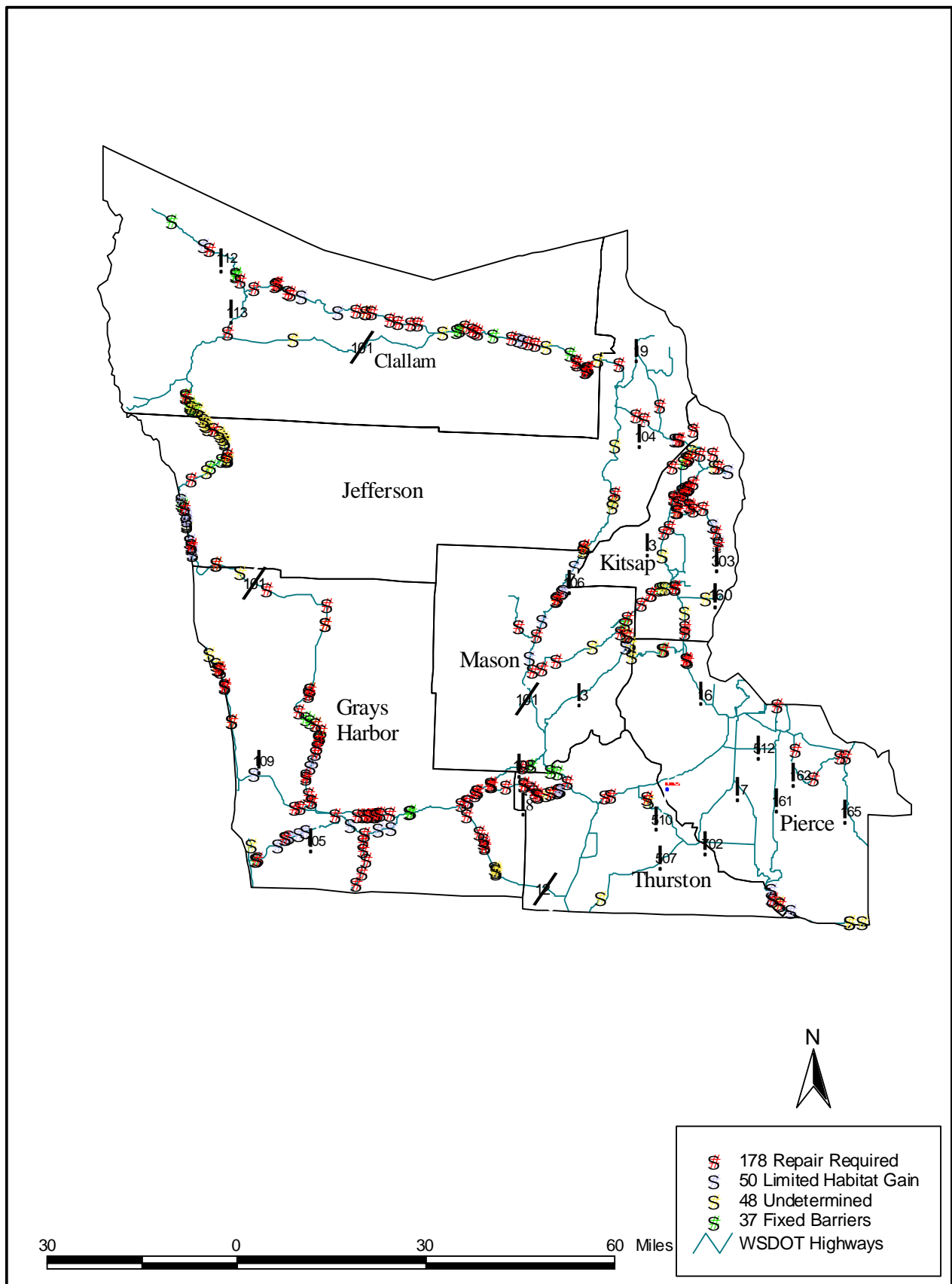


Figure 5. WSDOT Olympic Region Fish Barriers, March 2003.

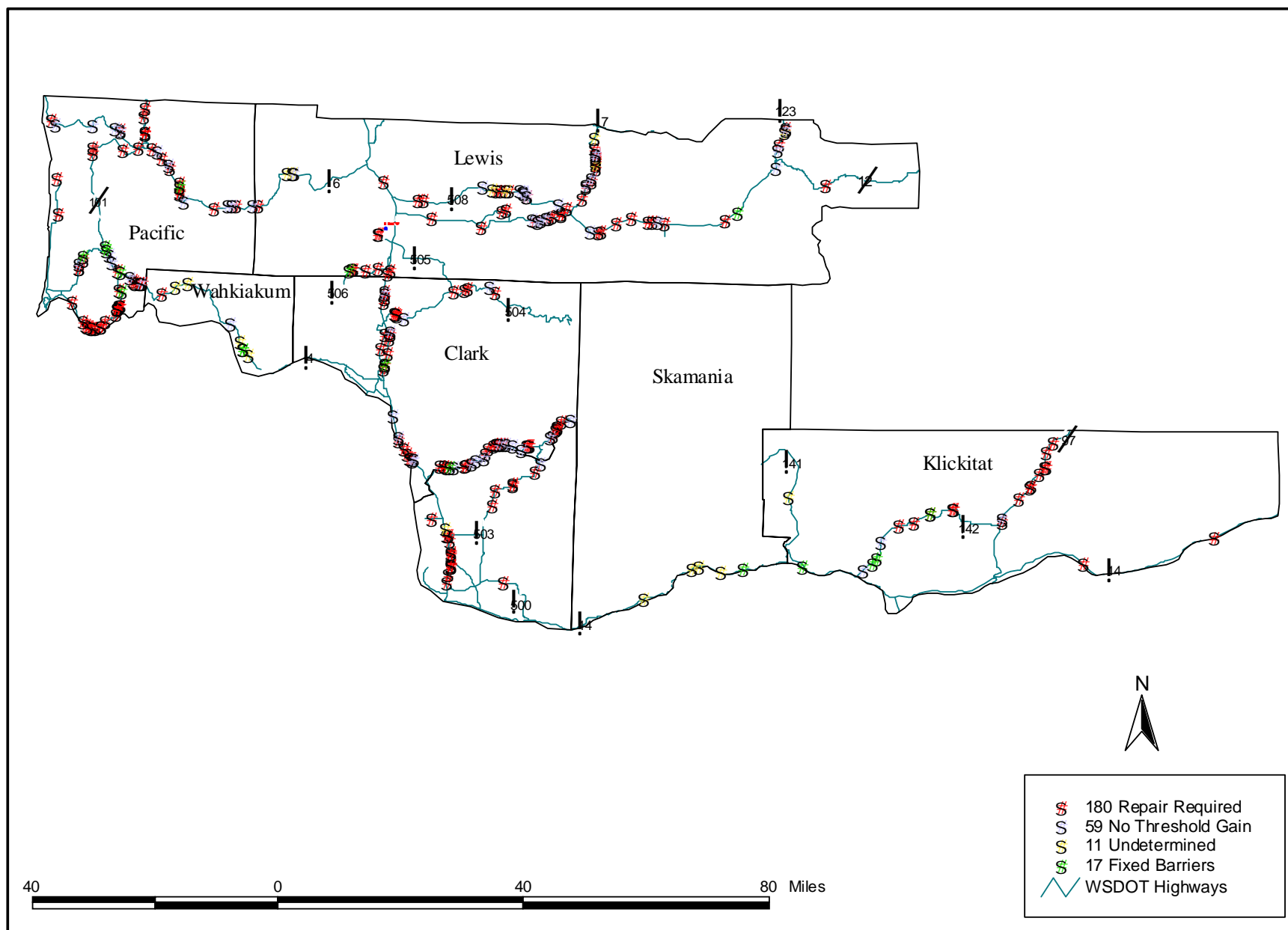


Figure 6. WSDOT Southwest Region Fish Barriers, March 2003.

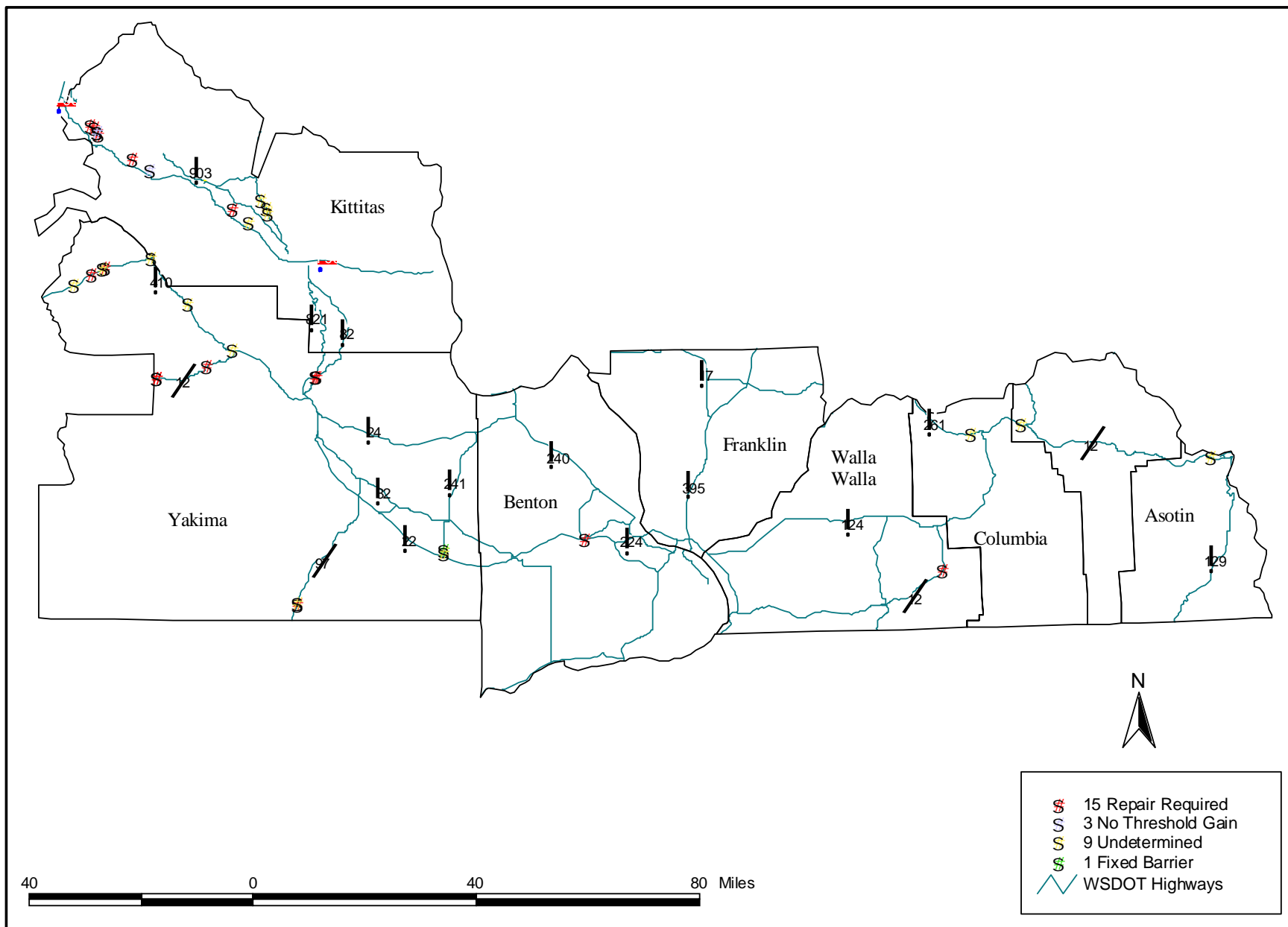


Figure 7. WSDOT South Central Region Fish Barriers, March 2003.

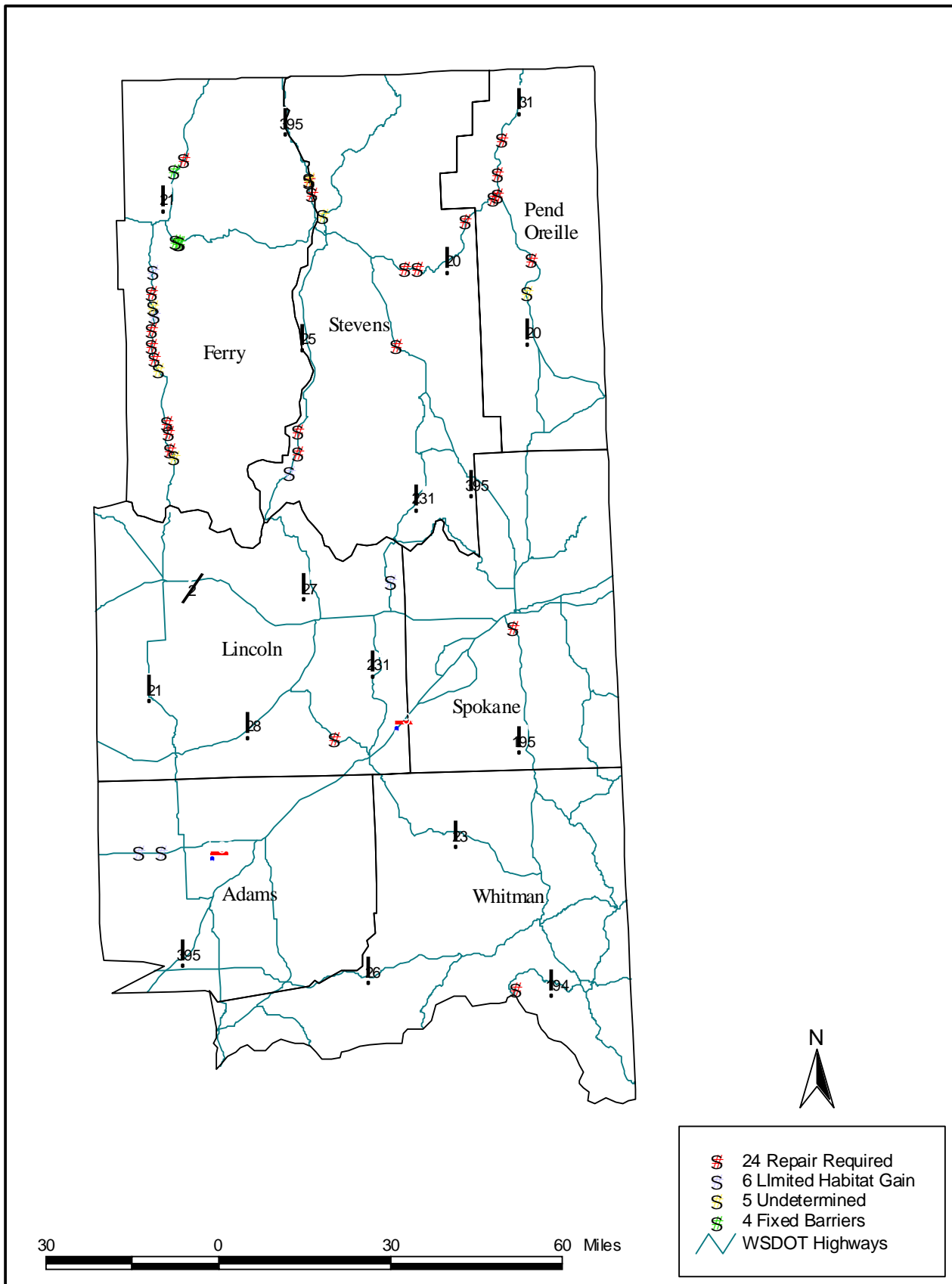


Figure 8. WSDOT Eastern Region Fish Barriers, March, 2003.



## **WSDOT Fish Passage Barrier Correction Plan**

WSDOT has a goal of evaluating and correcting state highway fish barriers based on a Twenty-year System Plan, using a three pronged approach. First, it designates dedicated (I-4) funding to correct the highest priority fish passage barriers within the Environmental Retrofit Program's *Six Year Plan*. Second, as road projects are constructed, additional fish passage barriers are removed whenever a Hydraulic Project Approval (HPA) is required. Combining fish passage restoration with road project construction decreases costs by eliminating duplication in mobilizing equipment and personnel. And third, some fish passage barriers are corrected as a result of routine maintenance of failing culverts.

This approach to salmonid habitat reclamation does not assume habitat will immediately be used by target salmonids. Many brood years may be required before newly opened habitat cycles up to full production. Fish management decisions, such as supplementation or harvest adjustments, may be needed. Additional factors, other than the loss of stream habitat caused by fish migration barriers, can affect fish production. Removal of WSDOT barrier road crossings cannot solve all salmonid production problems. Many other problems to salmon habitat are prevalent, such as non WSDOT barriers, storm-water, pollution, agricultural diversions, hydropower, and general habitat degradation.

Fish passage problems in Washington are shared by federal, state, county, and city and private entities. In Washington, WSDOT is responsible for an estimated 7,000 miles of highway, while Counties and Cities, for example, are responsible for an estimated 54,000 miles of road. The 610 WSDOT-owned fish barriers currently identified as needing near-term correction block more than 1,319 linear kilometers (820 miles) of potential salmonid habitat. To realize potential habitat gain, other non-WSDOT barriers will also need to be corrected.

### **Fish Passage Barrier Correction with Dedicated I-4 Funding**

Each biennium dedicated funding is set aside within the WSDOT Environmental Retrofit Program (I-4) budget to provide for a sequential correction of high priority fish passage barriers identified during the WSDOT inventory. WSDOT and WDFW refer to this I-4 funding program as Dedicated Funding. Projects are prioritized and funded to provide the largest gains in habitat and fish production. Many factors determine a project's priority. Prioritization criteria include the degree of passability improvement, species-specific production potential of the gained habitat, amount of habitat gained, benefits or drawbacks from increased mobility to species present, stock status of species present, and cost of the project. All the factors are consolidated in a numeric Priority Index (PI) model ranking each project's relative priority that includes production benefits to both anadromous and resident salmonid species.

### **Six Year Planning Document**

At the request of WSDOT, WDFW has prepared a prioritized list of fish passage projects to be constructed and evaluated over the next three biennia. This list is the result of project evaluation, scoping, development of on-site engineering conceptual designs, and budgeting. The WSDOT Six Year Plan is included in Appendix IV. The Six Year Plan is regularly updated as projects are scoped and refined.

Before a project is placed on the Six Year Plan, many phases of project development are completed, referred to by WDFW as fish passage “project scoping”. WDFW biologists and engineers work as a team to develop projects. The project scoping occurs in two phases. During Phase 1, the highest priority fish barriers are reviewed for placement on the Six Year Plan. Generally barriers with the highest PI numbers (greater than 15.00) are reviewed. Barriers with lower PI numbers may be reviewed and placed on the Six Year Plan, once all the higher priority barriers have been fixed, while limited habitat gain barriers are considered for correction during transportation and maintenance projects or . Phase 2 project scoping occurs once the projects are placed on the Six Year Plan.

### **Fish Passage Project Scoping Process - Phase 1**

During monthly project scoping meetings, WDFW biologists present a summary of the key information collected in the inventory and habitat assessment effort for the highest priority fish barriers. The first step in the scoping process involves verification of inventory and assessment data and filling in any data gaps. Next, the WDFW biologists confirm completion of inventory work and prioritization effort for each barrier culvert and verify habitat conditions and species expected to benefit are correctly reflected in the PI for each barrier. In addition to the PI, other factors for fish passage project selection, such as additional human-made barriers in the watershed, project feasibility, likelihood for success, and project costs are also considered. All scoping information is summarized and a map is generated to show the location of additional human-made barriers located downstream and upstream of the WSDOT barrier. Once biological scoping is complete, projects that successfully meet the verification process will be recommended to be placed on the Six Year Plan. In some instances, projects are placed on hold until further evaluation work is completed.

For every WSDOT fish barrier recommended for the Six Year Plan, WDFW engineers conduct an engineering on-site field review with the WDFW scoping biologist and the appropriate WSDOT regional staff including the biologist and hydrologist. They consider at least one conceptual design option for fish passage barrier correction and jointly generate an initial cost estimate for the project. WDFW refers to this process as engineering scoping, or the engineering conceptual design review. Initial cost estimates are reported on the Six Year Plan and are intended to be used to request funding for further project development, engineering design, right-of-way acquisition, and construction. Project costs shown on the Six Year Plan may increase or decrease during subsequent years due to consideration of different design options, increased cost of labor and materials, increased vehicle traffic, land acquisition, or any other unforeseen factors.

WSDOT fish passage barriers are placed on the Six Year Plan when both the biological and engineering scoping is completed by WDFW, and the appropriate WSDOT regional staff have concurred with the conceptual design option and the cost estimate.

### **Fish Passage Project Scoping Process - Phase 2**

When the WDFW is the project lead, WSDOT fish passage barrier correction planing is taken to the 80% design level, prior to development of the funding contract. The 80% design level is part of a scoping report that includes a description of the problem, design rational, hydraulics and hydrology analysis, and other relevant calculations necessary to support the design. The scoping

report also includes a detailed cost estimate that when approved, will serve as the platform for the final design and construction contract budget. WDFW submits the scoping report to the appropriate WSDOT region for review and approval. Once approved by the region, a copy of the approval letter is submitted, along with the construction contract, for processing by the WSDOT operations office.

When WSDOT is the project lead, the scoping report should be submitted to a WDFW environmental engineer for approval. Before applying for the required Hydraulic Project Approval, it is important to obtain an approved scoping report from a WDFW environmental engineer. It is most efficient to work with the WDFW fish passage technical assistance engineer, Pat Powers at (360) 902-2546.

Guidance for when WDFW or WSDOT will be project lead is based on the following criteria:

Project development and construction will normally be the responsibility of WDFW for projects that involve features and structures located outside of the roadway prism, such as instream grade control structures. Occasionally, WDFW engages in projects within the road prism exclusive of complete excavation of the road with associated traffic control.

Project development and construction will normally be the responsibility of WSDOT for projects that involve work within the roadway prism and require a complete road excavation and a detour or other means of traffic control.

For projects that involve work within and outside the roadway prism, WSDOT is the overall project lead. WDFW may design the culvert (size, type and placement) and the channel improvements, while WSDOT would design the roadway improvements to accommodate the new culvert, design the traffic control, assemble the plans, specifications and estimates, and administer the contract.

### **WSDOT Fish Passage Barriers Corrected with Dedicated Funding**

Since the inventory began, fish passage barriers have been corrected by WSDOT and WDFW's Technical Applications Division (formerly the Environmental Restoration Division), using dedicated funding, at 53 high priority sites (see Table 2). Fish passage barriers corrected in 2002 include fishway construction at Cement Creek, West Fork Hylebos Creek, and an unnamed tributary to Bulson Creek, log control replacement at Coal Creek, and culvert replacements at Fink and Moose creeks (see figures, pages 25-30).

### **Fishways**

In addition to culverts, WSDOT owns and maintains 101 fishways statewide. Eighteen of those fishways are now barriers to fish passage, and one, although not a barrier, requires maintenance for fish passage (see Appendix II). The other 82 fishways are effectively providing fish passage.

Table 2. Dedicated Funding Projects Completed through WSDOT/WDFW Barrier Removal Program.

Project Description	WRIA	Tributary To	PI	WSDOT Region	Highway	MP	Agency	Year	Cost (I-4 Funds)	Habitat Survey Length (m)	Habitat Gain (m <sup>2</sup> )
Tumwater Cr Fishway	18.0256	Port Angeles Harbor		Olympic	US 101	246.40	WDFW	1991	\$18,356	1,440	6,158
Fisher Cr Fishway	03.0181	Carpenter Cr		Northwest	I-5	219.20	WDFW	1992	\$20,000	1,430	28,376
Evans Cr Fishway	08.0106	Bear Cr		Northwest	SR 202	11.96	WSDOT	1992	\$319,044	4,480	4,922
Parish Cr Fishway	15.0220	Gorst Cr		Olympic	SR 3	33.70	WDFW	1992	\$14,834	1,600	7,594
Green Cr Fishway Upgrade	24.0341	Willapa R		Southwest	SR 6	8.90	WSDOT	1992	\$8,000		10,134
Chuckanut Cr Fishway	01.0626	Chuckanut Bay	38.28	Northwest	SR 11	18.00	WDFW	1993	\$68,788	2,680	22,565
Unnamed Tributary Culvert Replacement	07.0864	Skykomish R	19.23	Northwest	US 2	18.00	WSDOT	1993	\$60,000	1,726	7,669
Squalicum Cr Fishway	01.0552	Bellingham Bay	38.09	Northwest	SR 542	3.50	WSDOT	1994	\$68,000	4,745	16,567
Bagley Cr Fishway	18.0183	Strait Of Juan De Fuca	48.12	Olympic	US 101	253.85	WDFW	1994	\$42,306	10,450	33,970
S Nemah R Fishway	24.0503	Willapa Bay	34.34	Southwest	US 101	29.80	WDFW	1994	\$34,986	4,362	17,857
Johnson Cr Fishway	17.0301	Port Williams	28.17	Olympic	US 101	266.50	WDFW	1995	\$121,945	1,754	7,208
Pussywillow Cr Culvert Replacement	10.0048	White R	15.48	Northwest	SR 164	8.30	WSDOT	1996	\$100,000	5,738	5,092
Grader Cr Fishway	20.0237	Bogachiel R	24.48	Olympic	US 101	189.40	WDFW	1996	\$183,000	4,484	25,894
Huelsdonk Cr Fishway	20.0437 D	Hoh R	24.69	Olympic	US 101	171.70	WDFW	1996	\$183,000	1,292	12,709
Harlow Cr Fishway	21.0134	Queets R	25.68	Olympic	US 101	146.85	WDFW	1996	\$96,000	5,525	33,156
Rasmussen Cr Bridge	19.0230	Strait of Juan de Fuca	15.42	Olympic	SR 112	4.00	WDFW	1996	\$603,000	1,325	6,023
Ashley Cr Weirs	08.0083	Little Bear Cr	14.24	Northwest	SR 9	1.18	WDFW	1997	\$24,264	1,800	4,210
Unnamed Tributary Fishway and Culvert Replacement	22.0052	Fairchild Cr	19.46	Olympic	US 101	104.90	WDFW	1997	\$207,206	5,462	16,164
Kinnman Cr Culvert Retrofit, Baffles, and Roughened Channel	15.0368	Hood Canal	28.95	Olympic	SR 3	57.10	WSDOT	1997	\$365,902	3,623	9,745

Table 2. (cont.)

Project Description	WRIA	Tributary To	PI	WSDOT Region	Highway	MP	Agency	Year	Cost (I-4 Funds)	Habitat Survey Length (m)	Habitat Gain (m <sup>2</sup> )
Fairchild Cr Fishway and Culvert Removal	22.0051	Humptulips R	20.30	Olympic	US 101	105.60	WDFW	1997	\$193,258	4,238	19,214
Unnamed Tributary Culvert Removal	22.0057	Big Cr	17.07	Olympic	US 101	103.65	WDFW	1997	\$96,175	3,434	11,009
Church Cr Baffles and Fishway	05.0021	Church Cr	33.70	Northwest	I-5 (Old 99)	216.70	WDFW	1998	\$17,101	1,600	43,557
Big Cedar Cr Baffles	20.0576	Pacific Ocean	19.73	Olympic	US 101	162.15	WDFW	1998	\$122,998	2,351	11,036
Steamboat Cr Fishway and Culvert Replacement	20.0574	Pacific Ocean	27.53	Olympic	US 101	162.60	WSDOT	1998	\$23,000	7,434	51,530
Unnamed Tributary Culvert Removal	22.0059	SB Big Cr (Humptulips R)	20.62	Olympic	US 101	101.10	WDFW	1998	\$249,305	3,811	9,960
McDonald Cr Fishway	14.0023	Skookum Cr	23.21	Olympic	SR 108	8.90	WDFW	1998	\$260,997	1,274	2,301
Jewett Cr Culvert Replacement	29.0342	Columbia R	10.20	Southwest	SR 14	66.00	WSDOT	1998	\$413,000	210	807
First Cr Bridge	47.0096	Lake Chelan		North Central	SR 971	8.90	WSDOT	1999	\$265,000	200	4,200
First Cr Bridge	47.0096	Lake Chelan		North Central	SR 971	9.10	WSDOT	1999	\$265,000	200	4,000
Tibbetts Cr Fishway	08.0169	Lake Sammamish	23.16	Northwest	SR 900	19.50	WDFW	1999	\$147,000	671	2,077
Schoolyard Cr Fishway and Culvert Replacement	05.0145	Stillaguamish R	21.32	Northwest	SR 530	25.90	WDFW	1999	\$350,000	1,280	3,477
Unnamed Tributary Fishway	21.0715	Pacific Ocean	15.49	Olympic	SR 109	36.40	WSDOT	1999	\$189,566	842	1,783
Birnie Cr Fishway	25.0281	Columbia R	30.28	Southwest	SR 4	35.60	WDFW	1999	\$67,570	3,924	35,766
Beaver Cr Culvert Replacement	48.0307	Methow R	37.85	North Central	SR 153	29.28	WSDOT	2000	\$554,000	96,354	165,674
Unnamed Tributary Baffles and Grade Controls	05.0065	Pilchuck Cr	42.03	Northwest	I-5	211.50	WDFW	2000	\$116,577	9,246	21,938
Valley Cr Baffles and Roughened Channel	18.0249	Port Angeles Harbor	33.07	Olympic	US 101	246.90	WDFW	2000	\$92,000	2,021	11,883

Table 2. (cont.)

[illegible]

## WSDOT Transportation Improvement Projects

Integration of fish passage repairs and road project construction is a cost-effective way to accelerate barrier correction and reduce equipment mobilization costs. WDFW and WSDOT integrate fish passage barrier correction into planned WSDOT transportation improvement projects.

Transportation project reviews take place at least one year prior to the anticipated construction dates to accommodate WSDOT transportation project long-range budgeting and planning requirements. Every odd year, WDFW requests and receives a list of proposed transportation projects from each of the six WSDOT regions. Transportation projects reviewed include Mobility (I-1 subprogram) and Highway Safety (I-2 subprogram) of the Highway Improvement Program as well as Other Facilities projects (P-3 subprogram) of the Highway Preservation Program. All the fish passage barriers inventoried during the Safety and Mobility reviews should be considered for correction, including barriers with limited habitat gain that are not considered for correction with Dedicated Funding.

This report includes the results of transportation project reviews conducted by WDFW in 1998, 1999, 2000, and 2001. No transportation project reviews were conducted in 2002; the next reviews are scheduled to take place during Spring 2003.

During the summer and fall of 1998, 1999, 2000, and 2001, WDFW inventoried a total of 1,560 highway kilometers (969.29 miles) within Highway Safety and Mobility projects statewide and evaluated 438 culverts, assessing 142 as fish passage barriers (Table 2). For detailed accounts of Highway Safety and Mobility project reviews in each region, refer to the July, 2002 *Progress Performance Report for Fish Passage Inventory* located at: [http://www.wsdot.wa.gov/environment/eao/fishpass/state\\_highways.htm](http://www.wsdot.wa.gov/environment/eao/fishpass/state_highways.htm)

Table 3. Summary of Proposed WSDOT Highway Safety and Mobility projects - Fish Passage Inventory Efforts.

WSDOT Region	Total Distance Surveyed <sup>1</sup> (miles)	# of Fish Crossings Identified	# of Fish Barriers Requiring Repair <sup>2</sup>
Northwest	216.52	118	42
North Central	215.33	53	12
Olympic	179.29	129	43
Southwest	124.78	88	31
South Central	180.74	38	8
Eastern	52.63	12	6
<b>Total:</b>	<b>969.29</b>	<b>438</b>	<b>142</b>

<sup>1</sup> On/Off ramps were also evaluated, though they are not included in the total distance surveyed.

<sup>2</sup> Represents fish barriers requiring repair that are located within the proposed Safety and Mobility project vicinity.



## **Barrier Correction in the course of WSDOT Transportation Improvement and Road Construction Projects**

Commonly, road culverts require maintenance, or fail completely and require replacement. Work within the ordinary high water marks of flowing streams requires an Hydraulic Project Approval (HPA), which provides WDFW habitat biologists an opportunity to work with WSDOT engineers to correct fish passage deficiencies. In this process, the WDFW's Technical Applications Division (TAPPS) may be contacted to provide detailed stream surveys, identify fish passage barriers, or to provide other pertinent information. WDFW/TAPPS maintains a centralized, statewide, fish passage database, which includes the WSDOT fish passage inventory data. To facilitate planning efforts, WDFW reviews the milepost vicinities of upcoming safety and mobility projects following routine fish passage inventory procedures and makes recommendations on fish passage repairs to the appropriate WSDOT region.

It is important WSDOT notify WDFW/ TAPPS whenever a WSDOT fish passage barrier is scheduled for correction, or has been corrected during road construction or routine maintenance in order for WDFW/ TAPPS to inspect all WSDOT fish barrier corrections and update the fish passage database to reflect the status of corrected WSDOT fish passage barriers.

Consideration of fish passage barrier correction within WSDOT regional safety (I-2) and mobility (I-1) transportation project planning is essential to cost-effective barrier correction. Coordination of barrier correction during routine transportation projects eliminates the cost of road machinery transport and traffic control incurred during barrier correction with Dedicated Funding.

Thirty-one fish passage barriers were reported corrected by WSDOT during safety and mobility projects since 1982. Three barriers were corrected during WSDOT's routine operational maintenance and nine barriers were corrected using other funding sources (see Table 4). During recent road improvement projects on SR 18, WSDOT improved fish passage by replacing smaller culverts with bridges or oversized bottomless arches (see Figure 9).



Figure 9. Jenkins Creek on SR 18 at milepost 12.70. A new bridge constructed during a road improvement project replaced an under-sized concrete box culvert.

Table 4. Fish Passage Projects Completed through WSDOT Transportation Projects and Other Funding Sources.

WSDOT Region	Highway	Milepost	Stream	Tributary	WRIA	Species Expected to Benefit	Funding	Year Inspected	Fish Passage Compliance
Northwest	SR 542	6.55	Anderson Cr	Nooksack R	01.0228	CO/SH/CT	OTH	2000	yes
Northwest	SR 202	13.80	Dry Cr	Patterson Cr	07.0383A	CO/RT	TP	2002	yes
Northwest	SR 527	6.57	Penny Cr	North Cr	08.0077	CO/SH/CT/RB	OTH	1999	yes
Northwest	SR 530	29.60	Mc Govern Cr	NF Stillaquamish R	05.0168	CK/CO/SH/CT	TP	1997	yes
Northwest	SR 104	29.65	McAler Cr	Lk Washington	08.0049	CK/CO/SO/RB/CT	TP	1998	yes
Northwest	SR 528	2.47	Munson Cr	Allen Cr	07.0073	CO/CH/RT	OTH	2002	yes
Northwest	SR 18	8.90	Soosette Cr	Soos Cr	09.0073	CO/SH/CT	TP	1997	yes
Northwest	SR 18	12.70	Jenkins Cr	Soos Cr	09.0087	CO/SH/CT	TP	2002	yes
Northwest	SR 18	13.80	Jenkins Cr	Soos Cr	09.0087	CO/SH/CT	TP	2002	yes
Northwest	SR 530	55.90	Unnamed	Skagit R	04.0707	CT/CK/SH/CO/CH	TP	1997	yes
Northwest	SR 530	55.10	Unnamed	Sauk R	04.1062	CT/CK/SH/CO/CH	TP	1997	yes
Northwest	SR 530	54.60	Unnamed	Sauk R (Skagit)	04.1064	CT/CK/SH/CO/CH	TP	1997	mr
Northwest	SR 530	31.20	Unnamed	Stillaguamish R	05.0168X	CO/SH/CT	TP	1997	yes
Northwest	SR 530	31.90	Unnamed	Stillaguamish R	05	CO/SH/CT	TP	1997	yes
Northwest	SR 18	19.70	Unnamed	Carey Cr (Issaquah Cr)	08.0218A	CO/SH/CT/RB	TP	1997	yes
Olympic	US 101	357.90	Holiday Valley Cr	Schneider Cr	14.0009A	CH/CO/CT	OTH	1986	yes
Olympic	US 101	356.80	Countyline Cr	Schneider Cr	14.0010	CH/CO/SH/CT	OTH	1985	yes
Olympic	SR 302	11.32	Little Minter Cr	Minter Cr	15.0051	CO/RT	OM	1982	yes
Olympic	SR 308	1.15	Big Scandia Cr	Liberty Bay	15.0280	CK/CH/CO/SH/CT	TP	2002	mr
Olympic	US 12	12.36	Unnamed	Unnamed to Metcalf Sl	22.0349	CO/SH/SCT/RT	OTH	2001	yes
Olympic	US 12	12.48	Camp Cr	Unnamed to Metcalf Sl	22.0351	CO/SH/RT	OTH	2000	yes
Olympic	SR 305	12.80	Dogfish Cr	Liberty Bay	15.0285	CK/CH/CO/SH/CT	TP	2000	yes
Olympic	SR 112	48.49	Field Cr	Strait of Juan de Fuca	19.0026	CO/SH/CT	TP	2002	yes
Olympic	US 101	186.40	Frakker Cr	Bogachiel R	20.0237O	CO/SH/SCT/CK/SO	TP	1997	yes
Olympic	US 101	186.30	Fuhrman Cr	Bogachiel R	20.0237E	CO/SH/CT	TP	1997	yes
Olympic	US 101	174.00	Lost Cr	Hoh R	20.0440	CO/SH/CT	TP	2000	yes
Olympic	US 101	186.45	Unnamed	Frakker Cr	20.0237X	CO/SH/CT	TP	1997	yes
Olympic	SR 105	31.10	Unnamed	South Bay	22	CO/RT/SCT	OM	2000	yes
Olympic	US 101	186.70	Forgotten Marsh	Fuhrman Cr	20.0237N	CO/SH/CT	TP	1997	yes
Olympic	SR 112	19.90	Unnamed	Clallam R	19.0129A	CO/SH/SCT/RT	TP	2001	yes
Olympic	US 101	175.15	Unnamed	Old Joe Sl	20.0440B	CO/SH/CT	TP	1997	yes

Table 4. (cont.)

<b>WSDOT Region</b>	<b>Highway</b>	<b>Milepost</b>	<b>Stream</b>	<b>Tributary</b>	<b>WRIA</b>	<b>Species Expected to Benefit</b>	<b>Funding</b>	<b>Year Inspected</b>	<b>Fish Passage Compliance</b>
Olympic	US 101	111.90	Unnamed	Stevens Cr	22	DB/CO/CH/SCT/RT/SH/CK	OTH	2002	<b>no</b>
Olympic	SR 112	19.60	Unnamed	Clallam R	19	CO/SH/SCT/RT	TP	2001	yes
Southwest	SR 142	5.20	Dillacort Cr	Klickitat R	30.0009	SH/CT/RT	TP	2001	yes
Southwest	SR 14	55.80	Dog Cr	Columbia R	29.0130	SH/CK/RT/DB	OTH	1998	yes
Southwest	US 12	127.44	Dry Cr	Cowlitz R	26.1119	RB/CT	TP	1999	yes
Southwest	US 101	24.13	Unnamed	Willapa Bay	24.0673	CO/SH/RB/CT/CH	OTH	2000	yes
Southwest	SR 142	3.65	Knight Cr	Klickitat R	30.0008	CK/CO/SH/CT	TP	2001	yes
Southwest	I-5	42.40	Unnamed	Cowlitz R	26.0129	CO/SH/CT	TP	2000	yes
Southwest	US 101	28.92	Roaring Cr Sl	Naselle R	24.0563	CO/SCT/RT/SH	TP	2000	yes
South Central	SR 241	9.20	Unnamed	Sulphur Cr Wasteway (Yakima R)	37	CO/RT	TP		
Eastern	SR 21	172.17	Lambert Cr	Curlew Cr	60.0327	CT/RB	OM	2002	yes
Eastern	SR 20	389.50	Renshaw Cr	Pend Oreille R		RT	TP	2000	<b>no</b>
Eastern	SR 20	388.10	Unnamed	Lk Thomas		RT	TP	2000	yes
Eastern	SR 20	380.13	Renshaw Cr	Pend Oreille R		RT	TP	2000	<b>no</b>

**Species Designator:**

CH – chum salmon  
 CO – coho salmon  
 CK – chinook salmon  
 SH – steelhead trout  
 SCT – searun cutthroat trout  
 RT – resident trout  
 SO – sockeye salmon  
 PK – pink salmon

**Funding Codes:**

OM – operational maintenance  
 TP – transportation project  
 OTH – other

**Fish Passage Compliance Codes:**

yes – meets fish passage requirements  
 no – project does not meet current passage requirements  
 mr – project requires maintenance for fish passage

## **Johnson Creek**

### **After Construction**



Figure 10. In 2001, this bottomless concrete box culvert replaced two round corrugated steel culverts, which were assessed as barriers due to a 1.5% slope and high water velocity inside the culverts. The above culvert is located on SR 4 at milepost 4.50.

## **Coal Creek**

### **After Construction**



Figure 11. In a 2002 project, WSDOT replaced failed rock weirs with 3 wooden log controls downstream of a concrete box culvert located on I-405 at milepost 10.12.



## Bulson Creek

### Original Culvert



Figure 12. The concrete round culvert located on SR 534 at milepost 1.2 was considered a barrier due to a 4.5% slope and high water velocity inside the culvert.

### New Fishway



Figure 13. A pool-chute fishway at the downstream end of the new steel culvert that is fitted with baffles. Almost five miles of habitat has been reopened to salmonids.

## Cement Creek

### Before Construction



Figure 14. Shown here is a round steel culvert assessed as a barrier due to slope and water velocity inside the culvert during high flows. The barrier culvert located on SR 401 at milepost 8.8 was retrofitted with a fishway in 2002 (shown below).

### New Fishway



Figure 15. The completed pool-chute fishway is passable to fish at a wide range of flows.

### Spawning Chum



Figure 16. Chum salmon spawning in large numbers above the new fishway. Over five hundred live chum were observed spawning within 500 m upstream of the fishway.

## Moose Creek

### Before Construction



Figure 17. Two round, corrugated steel culverts located on SR 530 at milepost 44.0 were considered barriers due to a slope of 1.7%. The culverts blocked access to 4,151 meters of coho salmon and steelhead trout habitat.

### After Construction



Figure 18. A large bottomless arch culvert replaced two round steel culverts. The streambed of the new culvert resembles the natural stream substrate providing fish passage at all flow conditions. A single downstream log control maintains a stable stream gradient throughout the crossing. The new culvert was constructed in 2002.



## Fink Creek

### Before Construction



Figure 19. These undersized round concrete culverts, located on SR 530 at milepost 44.27 obstructed fish passage due to high water velocities and a 1.9% slope.

### After Construction



Figure 20. A single, bottomless arch culvert provides unobstructed fish passage to salmonids.

## WF Hylebos Creek

### During Construction



Figure 21. Inside the culvert before pouring new concrete lift and installing baffles. The precast concrete culvert was a barrier due to a slope of 3.5%.

### After Construction



Figure 22. The new fishway, located on SR 99 at milepost 6.86, will provide access to 2.1 miles of stream habitat for chum and coho salmon, and steelhead and cutthroat trout.

## Evaluation of Dedicated Funding Projects, Before and After Barrier Removal

Working with recommendations and receiving funding support from WSDOT, WDFW has developed a three-level facility (culverts, fishways, and dams) and fish use *evaluation* procedure to be conducted prior to and after project completion. The evaluation is intended to:

- < assess new culvert installations and fishways for design, durability, and efficiency
- < determine fish utilization of the newly accessible habitat
- < troubleshoot problems associated with low fish production

Problems in fish production may be the result of chronically low escapements, habitat degradation, point or non-point source pollution, poaching, and additional barriers in the stream.

### *Evaluation Levels*

**Level 1** is the initial evaluation to determine fish utilization of a stream in a project area prior to construction and during the one-year tune-up period following barrier correction. Level 1 evaluation is funded by WSDOT and is conducted by WDFW on projects completed using dedicated I-4 funding (see Appendix V).

**Level 2**, funded by WDFW, is designed to monitor and make appropriate recommendations on streams where anticipated target species response to fish passage repairs is not evident through the Level 1 evaluation (see Appendix V). Level 2 evaluations may include juvenile salmonid surveys and/or adult salmonid spawner surveys, lasting as long as two brood cycles (*e.g.*, six years for coho salmon).

### *Purpose and Intent*

WDFW and WSDOT agree that all projects require follow up visits once construction is complete to verify successful fish passage and monitor fish use. Fishways require regular inspection and maintenance and must withstand the severity of high flows and weather events to conform to state fish passage laws. In addition, WDFW cannot predict how rapidly newly opened habitat will be utilized by target salmonids. Hence, WDFW, working with WSDOT, has set up the evaluation program; this evaluation pertains both to the fish passage project and to fish recovery in the stream where work has been done.

Pre- and post-project fish passage project evaluations are not designed to estimate resident or anadromous population size in target streams. It has been recognized that fish utilization of reclaimed habitat is influenced by brood year strength. Brood strength varies annually in response to changing environmental and fish harvest conditions. In some cases, fish production may be low due to other factors, including habitat problems in the target stream unrelated to the primary barrier, or local extirpations on streams blocked for many decades. Further, these evaluations are not a spawner escapement estimate, and are not an enumeration of smolt production, which involve site specific, detailed, and expensive salmonid studies. Level I and II evaluations are designed to identify the presence or absence of target species in streams, where correction of fish passage barriers has taken place.

### *On-Site Project Inspection (Level I)*

WDFW evaluates dedicated funding projects to ensure they function properly. All projects constructed using Dedicated I-4 Funding are evaluated for one year following construction. The one-year tune-up period allows for observation of conditions during high flow months when fish are migrating. During this period, any design or operational deficiencies are noted and corrected whenever possible. A Level 1 on-site review, consists of physical assessment by the WDFW project team to confirm the new fish passage installation is durable and efficient. Structural deficiencies are identified and corrected during the period beginning after project construction and ending on December 31 the year following. Level 1 evaluation work is funded by WSDOT.

### *Adult Spawner Surveys (Level I and II)*

Adult spawner surveys are a direct way to determine target species presence or absence above and below a completed WSDOT fish passage installation, or to evaluate a WSDOT pre-project barrier. Three spawner surveys are conducted per year, for 500 meters below and above the project, or to the confluence with a larger body of water downstream, or to a natural barrier upstream. A hip chain is used to measure 500 meters upstream and downstream and surveyor's tape is placed to mark the limits of the survey area. Survey results are forwarded to the WDFW Fish Management Program and reported to WSDOT. If the reaches 500 meters below and above the fish passage installation are reaches where fish are not likely to be holding or spawning, the team relocates the survey accordingly. Both pre- and post-project spawner surveys are planned for each project (see Appendix V for results of adult spawner surveys). All surveys conducted during the tune-up period are Level I assessments. Surveys conducted beyond this period are Level II.

Streams where target species are not found will be sampled repeatedly for fish presence in subsequent brood years. In cases where fish populations are not recovering, further steps may be taken to rebuild the depressed stock. The primary method for reestablishment of extirpated fish stocks is supplementation (fry, fingerling, or smolt planting from hatcheries, using a genetic stock similar to the native stock, when possible). A recommendation to pursue supplementation will be made to the WDFW Fish Management Program if the Level II evaluation shows a target fish stock is not recovering in a stream where a new fish passage installation was constructed.

An individual watershed approach is taken for streams under evaluation; problems associated with that specific watershed are discussed by the WDFW evaluation team. An approach to fish recovery, such as supplementation, fishing restrictions, or stream habitat improvement projects can be prescribed for the stream after two brood cycles, or six years of fish recovery evaluation.

### **Evaluation Results and Discussion**

To date, Level I and Level II evaluations show that most fish passage projects are facilitating recovery of target species (Appendix V). In a few streams, fish have not positively responded to the new fish passage facilities. This may be due to chronically depressed fish stocks. It will take time and possibly further enhancement efforts, and key habitat and harvest management decisions for recovery in these streams.



In some streams, newly accessible habitat is immediately colonized by fish populations. The largest immediate response was observed at Cement Creek, where a total of 679 chum salmon were counted on November 15, 2002, upstream of the new fishway, only a few weeks after its completion.

Four out of 6 projects completed in 2002 showed satisfactory fish use of reclaimed habitat. A number of the adult spawner surveys for projects completed in 2001 and in 2002 (Skinney, Frazer, and O'Brien creeks) will be conducted during spring and early summer of 2003 during steelhead spawning season. Adult spawner surveys need to be extended for Fink and Moose creeks, which were dry during spawner surveys in Fall 2002, and for Coal Creek, where no adult spawners were detected.

## Appendix I

WSDOT Fish Passage Barriers Inventoried as  
of March 2003

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Eastern	I-90	198.85	Unnamed	East Low Canal	41	culvert	RND	SPS	1.83	1.83	76.20	0	Slope/Outfall	NG	1.1	
Eastern	I-90	202.55	Unnamed	East Low Canal	41	culvert	RND	SPS	1.83	1.83	91.44	0	Slope/Outfall	NG	1.1	
Eastern	SR 194	1.2	Little Almota Cr	Snake R	35.1018	culvert	RND	CST	0.91	0.91	42.67	0	Slope/Outfall	RR	1.1	
Eastern	SR 195	93.39	Marshall Cr	Hangman Cr	56.0008	culvert	BOX	CPC	1.91	1.91	63.60	0	Outfall/Slope	RR	1.1	no
Eastern	SR 20	361.47	Unnamed	Keogh Lk	59	culvert	RND	CAL	0.60	0.60	32.52	67	Slope	RR	1.1	yes/om
Eastern	SR 20	363.73	Narcisse Cr	Lk Pend Oreille	59.0252	culvert	RND	PCC	0.96	0.96	15.80	0	Slope/Velocity	RR	1.2	
Eastern	SR 20	380.1	Unnamed	Lk Thomas	59	culvert	SQSH	CST	1.45	0.95	25.90	33	Slope	RR	1.1	no
Eastern	SR 20	388.13	Renshaw Cr	Pend Oreille R	62.0310	culvert	RND	CST	0.90	0.90	22.09	33	Slope	RR	1.2	
Eastern	SR 20	389.5	Renshaw Cr	Pend Oreille R	62.0310	culvert	SQSH	CST	1.92	1.40	23.70	33	Slope/Undersized	RR	1.1	
Eastern	SR 20	403.6	Reynolds Cr	Pend Oreille R	62.0408	culvert	RND	PCC	0.76	0.76	43.47	0	Slope/Outfall	RR	1.1	
Eastern	SR 20	411.4	Cusick Cr	Pend Oreille	62.0524	culvert	RND	PCC	0.76	0.76				UD	1.2	
Eastern	SR 21	115.5	Meadow Cr	Sanpoil R	52	culvert	BOX	PCC	1.83	1.83		0		UD	1.1	
Eastern	SR 21	117.05	Jack Cr	Sanpoil R	52	culvert	BOX	PCC	1.22	1.22		0	Outfall	RR	1.1	
Eastern	SR 21	120.1	Empire Cr	Sanpoil R	52	culvert	BOX	PCC	1.22	0.91	27.43	0	Slope/Outfall	RR	1.1	
Eastern	SR 21	122.05	Lime Cr	Sanpoil R	52	culvert	BOX	PCC	1.22	1.22		10		RR	1.1	
Eastern	SR 21	132.6	Cub Cr	Sanpoil R	52	culvert	RND	CST	0.91	0.91		80		UD	1.1	
Eastern	SR 21	134.2	NF Nanamkin Cr	Sanpoil R	52	culvert	BOX	PCC	1.22	1.83		0		RR	1.2	
Eastern	SR 21	136.5	Bear Cr	Sanpoil R	52	culvert	BOX	PCC	1.83	1.83		15		RR	1.1	
Eastern	SR 21	139.4	Anderson Cr	Sanpoil R	52	culvert	BOX	PCC	1.22	2.44		0	outfall	RR	1.1	
Eastern	SR 21	142.1	Nineteenmile Cr	Sanpoil R	52	culvert	BOX	PCC	1.22	2.44		15		NG	1.1	
Eastern	SR 21	143.2	Mires Cr	Kettle R	52	culvert	RND	CST	0.91	0.91		0		UD	1.1	
Eastern	SR 21	146.7	Rattlesnake Gulch	Sanpoil R	52	culvert	BOX	PCC	1.22	1.22		60		RR	1.1	
Eastern	SR 21	151.5	Sunset Cr	Sanpoil R	52	culvert	RND	PCC	0.91	0.91		0		NG	1.2	
Eastern	SR 21	175.2	St Peter's Cr	Curlew Cr	60	culvert	RND	CST	1.07	1.07	21.34	0	Outfall/Slope	RR	1.1	
Eastern	SR 23	52.3	Sheep Cr	Upper Crab Cr	43.0852	culvert	BOX	PCC	2.29	3.05	35.97	0	Slope	RR	1.1	
Eastern	SR 231	36.1	Unnamed	Spring Cr	54.0108A	culvert	BOX	PCC	1.22	1.83	16.15	0	Outfall/Slope	NG	1.1	
Eastern	SR 25	33.5	Unnamed	O-Ra-Pak-En Cr	58	culvert	RND	CST	0.91	0.91	36.58	0		NG	1.1	
Eastern	SR 25	37.6	Alder Cr	Lk Roosevelt	58.0134	culvert	BOX	PCC	1.52	1.83	20.42	10	Slope/Velocity	RR	1.1	
Eastern	SR 25	42.37	Hunters Cr	Lk Roosevelt	58.0146	culvert	BOX	PCC	1.68	3.96	27.13	20	Slope	RR	1.1	
Eastern	SR 25	84.6	Pingston Cr	Columbia R	61.0007	culvert	BOX	PCC	1.22	1.22	3.05	67	Slope	UD	1.1	yes/fp
Eastern	SR 31	3.8	Ione Millpond	Pend Oreille R	62.0279	culvert	BOX	PCC	2.13	2.44	25.91	0	Velocity	RR	1.1	
Eastern	SR 31	10.7	Sweet Cr	Pend Oreille R	62.0224	culvert	BOX	PCC	2.29	2.59	19.51	0	Velocity	RR	1.1	
Eastern	US 395	212.8	Unnamed	Colville R	59	culvert	RND	PCC	0.76	0.76	50.29	0	Outfall	RR	1.1	
Eastern	US 395	247.7	Deadman Cr	Kettle R	60.0008	culvert	BOX	PCC	1.52	2.13	45.72	0	Slope	RR	1.1	
Eastern	US 395	249.9	Matsen Cr	Kettle R	60.0056	culvert	RND	PCC	1.22	1.22	30.48	40	Slope	RR	1.1	
Eastern	US 395	250.2	Doyle Cr	Kettle R Arm	60.0060	culvert	RND	PCC	1.22	1.22	21.34	0	Slope	UD	1.1	yes/om
N Central	97AR	207.9	Unnamed Pond	Columbia R	46	culvert	RND	SPS	1.52	1.52				UD	1.1	
N Central	97AR	220.76	Byrd Canyon Cr	Columbia R	46.0380	culvert	RND	PCC	0.80	0.80	48.35	33	Slope	RR	1.1	no



## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
N Central	97AR	222.02	Oklahoma Gulch	Columbia R	47.0002	culvert	RND	PCC	1.40	1.40	44.34	0	Slope	RR	1.2	yes/om
N Central	SR 153	7.62	Squaw Cr	Methow R	48.0043	culvert	BOX	CPC	1.22	1.22	27.63	0	Outfall	RR	1.1	no
N Central	SR 153	24.3	Leecher Canyon Cr	Methow R	48.0265	culvert	RND	PCC	0.45	0.45	42.00	0	Pump box DS end	RR	1.1	yes/om
N Central	SR 153	24.3	Leecher Canyon Cr	Methow R	48.0265	gravity										
N Central	SR 155	60.76	Omak Cr	Okanogan R	49.0138	culvert	RND	PCC	1.22	1.22	19.60	67	Slope/Undersized	RR	1.2	yes/om
N Central	SR 155	60.92	Trail Cr	Omak Cr	49.0179	culvert	RND	PCC	1.22	1.22	17.30	33	Slope/Velocity	RR	1.1	no
N Central	SR 155	62.41	Unnamed	Omak Cr	49.0173	culvert	RND	PCC	0.91	0.91	33.59	0	Slope/Velocity	RR	1.1	no
N Central	SR 155	65.05	Clark Cr	Omak Cr	49.0165	culvert	RND	CST	0.76	0.76	34.30	0	Outfall/Slope	RR	1.1	no
N Central	SR 155	65.59	Swimptkin Cr	Omak Cr	49.0160	culvert	RND	CST	0.91	0.91	21.18	0	Slope/Velocity	RR	1.1	no
N Central	SR 155	66.94	Stapaloop Cr	Omak Cr	49.0152	culvert	RND	CST	1.90	1.90	45.51	33	Outfall/Slope	RR	1.1	no
N Central	SR 155	71.1	Haley Cr	Omak Cr	49.0143	culvert	RND	CST	0.61	0.61	20.91	33	Slope/Undersized	UD	1.1	no
N Central	SR 155	75.81	Mission Cr	Omak Cr	49.0139	culvert	BOX	CPC	2.45	2.45	42.89	0	Slope/Outfall	RR	1.1	no
N Central	SR 17	126.5	Unnamed	EF Foster Cr	50	culvert	RND	CST	1.22	1.22	36.58	20	Slope	UD	1.1	
N Central	SR 17	131.3	Unnamed	Columbia R	50	culvert	BOX	PCC	1.37	1.22	21.95	0	Slope/Outfall	UD	1.1	
N Central	SR 17	132.1	Unnamed	Columbia R	50	culvert	BOX	PCC	1.22	1.22	22.25	0	Slope	UD	1.1	
N Central	SR 173	11.8	Swamp Cr	Columbia R	49.0002	culvert	RND	CST	1.52	1.52	28.10		Outfall	UD	1.2	no
N Central	SR 20	163.61	Unnamed	Early Winters Cr	48	culvert	RND	CST	1.22	1.22	81.94	0	Outfall/Slope	NG	1.1	no
N Central	SR 20	168.25	Pine Cr	Early Winters Cr	48.1528	culvert	SQSH	SPS	3.47	2.24	19.33	0	Slope/Outfall	RR	1.1	no
N Central	SR 20	168.3	Unnamed	Early Winters Cr	48.0000	culvert	RND	CST	0.91	0.91	22.34	0	Slope/Outfall	NG	1.1	yes/om
N Central	SR 20	169.31	Unnamed	Early Winters Cr	48.0000	culvert	RND	CST	0.76	0.76	19.24	0	Outfall/Slope	NG	1.1	no
N Central	SR 20	170.73	Silver Star Cr	Early Winters Cr	48.0000	culvert	ARCH	SPS	2.48	1.80	37.81	0	Slope	NG	1.1	no
N Central	SR 20	171.97	Unnamed	Early Winters Cr	48.0000	culvert	RND	CST	1.22	1.22	27.10	0	Slope/Undersized	NG	1.1	no
N Central	SR 20	173.16	Varden Cr	Early Winters Cr	48.1479	culvert	SQSH	SPS	5.50	2.38	31.10	0	Slope	RR	1.1	no
N Central	SR 20	174.98	Pekin Cr	Early Winters Cr	48.0000	culvert	SQSH	SPS	2.32	1.66	19.64	0	Outfall/Slope	RR	1.1	no
N Central	SR 20	181.34	Little Boulder Cr	Methow R	48.1400	fishway		BC				0				
N Central	SR 20	185.93	Boesel Canyon Cr	Diversion Ditch	48	culvert	RND	CST	0.61	0.61	25.80	0	Slope/Outfall	RR	1.1	no
N Central	SR 20	188.17	Unnamed	Methow R	48	culvert	SQSH	CST	0.91	0.61	24.37	33	slope	RR	1.1	no
N Central	SR 20	205.84	Beaver Cr	Methow R	48.0307	culvert	BOX	CPC	1.83	1.83	15.00	67	Undersized	RR	1.2	no
N Central	SR 20	206.85	Frazer Cr	Beaver Cr	48.0309	culvert	RND	CST	0.91	0.91	12.29	67	slope	RR	1.2	no
N Central	SR 20	208.44	Unnamed	Frazer Cr	48.0309A	culvert	RND	CST	0.46	0.46	14.97	0	Slope	RR	1.1	no
N Central	SR 20	213.99	Frazer Cr	Beaver Cr	48.0309	culvert	RND	CST	0.61	0.61	18.30	33	Undersized/Slope.	RR	1.1	
N Central	SR 20	215.96	Summit Cr	Loup Loup Cr	49.0054	culvert	RND	CST	0.91	0.91	114.20	33	Slope	RR	1.1	no
N Central	SR 20	218.48	Summit Cr	Loup Loup Cr	49.0054	culvert	RND	CST	0.91	0.91	18.90	33	Slope	RR	1.1	no
N Central	SR 20	219.38	Summit Cr	Loup Loup Cr	49.0054	culvert	RND	CST	1.37	1.37	29.10	0	Outfall/Slope	RR	1.1	no
N Central	SR 20	220.1	Unnamed	Summit Cr	49	culvert	RND	OTH	0.76	0.76	35.67	33	Slope	RR	1.1	no
N Central	SR 20	220.85	Summit Cr	Loup Loup Cr	49.0054	culvert	RND	PCC	1.22	1.22	23.40	0	Outfall/Slope	NG	1.1	yes/om
N Central	SR 20	223.18	Little Loup Cr	Loup Loup Cr	49.0052	culvert	OTH	OTH	N Cent	3.19	112.48	0	Slope/Outfall	NG	1.1	no
N Central	SR 20	224.49	Tallant Cr	Okanogan R	49.0065	culvert	RND	PCC	1.07	1.07	22.30	0	Slope/Velocity	RR	1.1	no

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
N Central	SR 20	225.6	Tallant Cr	Okanogan R	49.0065	culvert	RND	PCC	1.52	1.52	25.92	33	Slope/Velocity	RR	1.1	no
N Central	SR 20	226.27	Tallant Cr	Okanogan R	49.0065	culvert	BOX	CPC	1.18	2.49	25.50	0	Outfall/Slope	RR	1.1	no
N Central	SR 20	226.96	Tallant Cr	Okanogan R	49.0065	culvert	RND	CST	1.83	1.83	31.98	0	Outfall/Slope	RR	1.1	no
N Central	SR 20	227.22	Tallant Cr	Okanogan R	49.0065	culvert	RND	CST	0.76	0.76	17.80	33	Slope/Velocity	RR	1.3	no
N Central	SR 20	263.4	Bonaparte Cr	Okanogan R	49.0246	culvert	BOX	CPC	3.06	1.86	29.96	33	Slope/Velocity	RR	1.1	no
N Central	SR 20	263.62	Bonaparte Cr	Okanogan R	49.0246	culvert	BOX	CPC	3.06	1.86	28.82	33	Slope/Velocity	RR	1.1	no
N Central	SR 20	264.08	Bonaparte Cr	Okanogan R	49.0246	culvert	BOX	CPC	3.06	1.84	29.91	33	Outfall/Slope	RR	1.1	no
N Central	SR 20	265.57	Unnamed	Bonaparte Cr	49	culvert	RND	PCC	0.61	0.61	25.30	0	Slope	UD	1.1	no
N Central	SR 20	266.09	Bonaparte Cr	Okanogan R	49.0246	culvert	BOX	CPC	3.05	1.84	28.70	33	Slope/Outfall	NG	1.1	no
N Central	SR 20	266.22	Bonaparte Cr	Okanogan R	49.0246	culvert	BOX	CPC	3.05	1.85	25.78	67	Slope/Velocity	RR	1.1	no
N Central	SR 20	278.6	Bonaparte Cr	Okanogan R	49.0246	culvert	BOX	CPC	2.15	1.82	15.10	33	Outfall/Slope/Depth	RR	1.1	no
N Central	SR 20	279.3	Bonaparte Cr	Okanogan R	49.0246	culvert	BOX	CPC	2.15	1.84	29.40	0	Slope	RR	1.1	no
N Central	SR 20	283.52	Unnamed	Bonaparte Cr	49	culvert	RND	CST	0.76	0.76	20.40	67	Slope	RR	1.1	no
N Central	SR 20	284.52	Unnamed	Bonaparte Cr	49	culvert	RND	PCC	0.76	0.76	23.00	67	Slope	RR	1.1	no
N Central	SR 215	3.91	Unnamed	Okanogan R	49	culvert	RND	CST	0.61	0.61	19.70			UD	1.1	no
N Central	SR 243	0	Unnamed	Columbia R	41	culvert	RND	CST	1.07	1.07	22.86	0		NG	1.1	
N Central	SR 26	1.79	Sand Hollow Cr	Columbia R	41.2151	culvert	RND	PCC	1.22	1.22	76.20	0	Outfall/Slope	RR	1.2	
N Central	SR 26	21.11	Unnamed	Crab Cr	43	culvert	RND	PCC	0.91	0.91	39.93	0	Slope/Velocity	NG	1.2	
N Central	SR 26	29.85	Unnamed	Lower Crab Cr	41	culvert	RND	CAL	2.50	2.50	20.53	33	Velocity	RR	1.1	no
N Central	SR 26	29.92	Unnamed	Lower Crab Cr	41	culvert	RND	CST	1.10	1.10	26.82	10	Slope	RR	1.1	no
N Central	SR 28	2.28	Sand Canyon Springs	Columbia R	44.0756	culvert	BOX	CPC	1.52	1.52	19.81	0	Outfall/Slope	RR	1.1	yes/om
N Central	SR 28	22.27	Baird Springs	Columbia R	41	culvert	BOX	PCC	3.66	3.05	113.39	0	Slope/Outfall	RR	1.1	
N Central	SR 283	2.2	Unnamed Ditch	West Canal (Crab Cr)	41	culvert	BOX	PCC				0		UD	1.1	
N Central	SR 283	4.00	Unnamed Ditch	West Canal (Crab Cr)	41	culvert	BOX	PCC				0		UD	1.1	
N Central	US 2	70.21	Mill Cr	Nason Cr	45.0956	culvert	RND	CST	3.66	3.66	55.67	0	Outfall/Undersized	RR	1.1	no
N Central	US 2	82.06	Unnamed	Nason Cr	45	culvert	RND	CST	0.91	0.91		0	Outfall/Slope	RR	1.1	no
N Central	US 97	152.92	Mill Cr	Swauk Cr	39.1188	culvert	RND	PCC	0.91	0.91	111.86	0	Slope/Outfall	RR	1.1	no
N Central	US 97	159.72	Swauk Cr	Yakima R	39.1157	culvert	RND	SPS	2.44	2.44	36.58	33	Outfall/Slope	RR	1.1	
N Central	US 97	164.7	Tronsen Cr	Peshastin Cr	45.0346	culvert	RND	PCC	0.61	0.61	67.06	0	Outfall/Slope	RR	1.2	no
N Central	US 97	165.77	Tronsen Cr	Peshastin Cr	45.0346	culvert	RND	CST	1.07	1.07	36.58	0	Outfall/Slope	RR	1.1	no
N Central	US 97	166.23	Tronsen Cr	Peshastin Cr	45.0346	culvert	RND	CST	1.07	1.07	30.48	0	Outfall/Slope	RR	1.1	no
N Central	US 97	260.28	Swamp Cr	Columbia R	49	culvert	RND	PCC	1.24	1.24		0	Undersized	RR	1.1	no
N Central	US 97	261.24	Unnamed	Columbia R	49.0000	culvert	BOX	CPC	2.44	2.42	91.90	0	Slope	RR	1.1	no
N Central	US 97	299.03	Johnson Cr	Okanogan R	49	culvert	SQSH	CST	1.90	1.00	21.64	33	Slope/Outfall	RR	1.1	no
N Central	US 97	324.67	Mosquito Cr	Okanogan R	49.0321	culvert	RND	PCC	2.13	2.13	16.70	67	Slope	RR	1.1	no
N Central	US 97	325.87	Unnamed	Okanogan R	49	culvert	RND	PCC	1.22	1.22	28.10	67	Slope/Undersized	UD	1.1	yes/om
N Central	US 97	328.16	Whistler Canyon Cr	Okanogan R	49	culvert	RND	PCC	0.91	0.91	35.30	33	Slope	RR	1.1	no
N Central	US 97	331.08	Unnamed	Okanogan R	49	culvert	RND	CST	2.13	2.13				UD	1.1	no

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Northwest	Anderson Rd	225.24	Martha WA Cr	Maddox Cr	03.2970	culvert	RND	CST	0.91	0.91	124.00	33	Undersized	RR	1.1	no
Northwest	DOT maint. yard		Unnamed	Yarrow Cr	08	culvert	SQSH	CST	0.91	0.91	132.00	33	Slope/Velocity	RR	1.1	yes/om
Northwest	Hwy 20		Gages Sl	Skagit R	03.0224	other								UD		
Northwest	Hwy 203	3.97	Unnamed	Griffin Cr	07.0365	culvert	RND	PCC	0.46	0.46	19.32	33	Slope	UD	1.1	no
Northwest	Hwy 536		Unnamed	Higgins Sl	03.0109	culvert	RND	CST	0.61	0.61	10.30			UD	1.1	
Northwest	Hwy 536		Unnamed	Higgins Sl	03.0109	culvert	RND	PCC	0.46	0.46	29.90			UD	1.1	
Northwest	Hwy 9		Unnamed	Lk McMurray	03.0227X	culvert	RND	CST	0.46	0.46	23.00			UD	1.1	
Northwest	Hwy 9		Unnamed	Lk McMurray	03.0227X	culvert	RND	CST	0.31	0.31	15.00			UD	1.2	
Northwest	Hwy 9		Unnamed	lk Cr	03.0227X	culvert	RND	PCC	0.61	0.61	11.00			UD	1.1	
Northwest	I-405	3.06	Unnamed	Cedar R	08	culvert	RND	OTH	1.30	1.30	140.87	0	Slope/Velocity	RR	1.1	no
Northwest	I-405	5.68	Unnamed	Lk Washington	09	culvert	RND	PCC	0.91	0.91		0	Velocity	NG	1.1	no
Northwest	I-405	12.7	Kelsey Cr	Mercer Sl	08.0259	fishway		WP				67				
Northwest	I-405	15.09	Yarrow Cr	Lk Washington	08.0252	culvert	RND	OTH	0.75	0.75	204.80	0	Outfall/Velocity	RR	1.1	no
Northwest	I-405	26.46	Perry Cr	North Cr	08.0070 A	fishway		BC				67				
Northwest	I-405	26.87	Unnamed	North Cr	08	culvert	RND	CST	1.05	1.05		0	Slope/Undersized	RR	1.1	no
Northwest	I-405	29.67	Martha Cr	Swamp Cr	08	culvert	RND	PCC	1.52	1.52	136.00	33	Velocity/Length	RR	1.1	no
Northwest	I-405	29.75	Swamp Cr	Sammamish R	08.0059	fishway		SCC				67				
Northwest	I-405 ROW	29.67	Martha Cr	Swamp Cr	08	culvert	RND	PCC	0.91	0.91	9.92	67	Slope/Velocity	RR	1.1	yes/om
Northwest	I-5	174.71	Thornton Cr	Lk Washington	08.0030	culvert	RND	PCC	1.75	1.75	465.00	33	Length/Depth	RR	1.2	no
Northwest	I-5	182.73	Swamp Cr	Sammamish R	08.0059	culvert	RND	CST	1.74	1.74	165.03	67	Velocity	RR	1.2	yes/om
Northwest	I-5	187.64	Unnamed	Silver Lk	08.0000	culvert	RND	PCC	0.91	0.91	25.00	33	Slope/Undersized	NG	1.1	no
Northwest	I-5	213.22	Unnamed	Unn. To Pilchuck Cr	05.0065C	culvert	SQSH	CST	0.70	0.45	37.21	0	Outfall/Slope	RR	1.1	no
Northwest	I-5	213.25	Unnamed	Unn. To Pilchuck Cr	05.0065B	culvert	SQSH	CST	0.70	0.45	36.74	0	Slope/Outfall	RR	1.1	no
Northwest	I-5	213.26	Unnamed	Unn. To Pilchuck Cr	05.0065C	culvert	RND	CST	0.61	0.61	62.00	0	Slope/Outfall	RR	1.1	no
Northwest	I-5	213.66	Unnamed	Pilchuck Cr	05.0065	culvert	RND	PCC	0.75	0.80	36.04	33	Slope	RR	1.1	no
Northwest	I-5	213.86	Secret Cr	Pilchuck Cr	05.0065	culvert	RND	CST	0.48	0.48	11.80	33		UD	1.1	no
Northwest	I-5	224.62	Maddox Cr	SF Skagit R	03.2966	culvert	RND	PCC	1.52	1.52	76.81	33	Velocity	RR	1.1	no
Northwest	I-5	225.98	Martha WA Cr	Maddox Cr	03.2970	culvert	RND	SST	0.70	0.70	31.66	67	Undersized	NG	1.1	no
Northwest	I-5	243.37	Unnamed	Samish Lk	03.0035	culvert	RND	CST	1.44	1.44				UD	1.1	
Northwest	I-5	244.2	Barnes Cr	Samish Lk	03.0036	culvert	RND	CST	1.83	1.83	26.08	33	Slope/Velocity	RR	1.1	no
Northwest	I-5	244.2	Barnes Cr	Samish Lk	03.0036	culvert	RND	CST	1.80	1.80	23.01	33	Slope/Undersized	RR	1.1	no
Northwest	I-5	245.73	Lake Cr	Samish Lk	03.0042	culvert	RND	SPS	1.83	1.83	71.00			UD	1.2	
Northwest	I-5	250.55	Padden Cr	Bellingham Bay	01.0622	culvert	BOX	CPC	1.52	1.55	131.46	0	Slope/Undersized	RR	1.1	no
Northwest	I-5	255.19	Squalicum Cr	Bellingham Bay	01.0552	culvert	RND	CMP	8.00	8.00	68.58	67	velocity	RR	1.2	no
Northwest	I-5	256.28	Baker Cr	Squalicum Cr	01.0553	culvert	SQSH	SPS	3.51	2.13	122.66	33	Slope/Velocity	RR	1.1	no
Northwest	I-5		WF Quilceda Cr	Quilceda Cr	07.0049	culvert								UD	1.1	
Northwest	I-5		Unnamed	Puget Sound		culvert	RND	PCC	0.76	0.76				UD	1.1	
Northwest	I-5 NB on ramp	256	Baker Cr	Squalicum Cr	01.0553	culvert	SQSH	CST	2.87	2.01	28.25	67	Slope	RR	1.1	yes/om

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Northwest	I-5 ROW	174.85	Thornton Cr	Lk Washington	08.0030	dam						0		RR		
Northwest	I-90	10.21	Richards Cr	Lk Washington	08.0156	culvert	OTH	OTH	0.91	0.91	216.00	0	Velocity	NG	1.1	yes/fp
Northwest	I-90	13.83	Lewis Cr	Lk Sammamish	08.0162	culvert	OTH	PCC	1.52	1.52	313.34	0	Slope	RR	1.1	no
Northwest	I-90	14.71	Unnamed	Lk Sammamish	08	culvert	RND	OTH	1.07	1.07	153.00	0	Slope/Velocity	RR	1.1	no
Northwest	I-90	15.48	Tibbets Cr	Lk Sammamish	08.0169	culvert	OTH	OTH	1.22	1.22	82.76	67	Velocity	RR	1.3	no
Northwest	I-90	18.83	EF Issaquah Cr	Issaquah Cr	08.0183	fishway		SCC				33				
Northwest	I-90	23.13	Soderman Cr	Raging R	07.0390	culvert	RND	CST	2.13	2.13	134.48	33	Slope	RR	1.1	no
Northwest	I-90	26.9	Unnamed	Good Cr	07	culvert	RND	CST	0.91	0.91	159.98	0	Slope/Outfall	NG	1.1	no
Northwest	I-90	26.99	Good Cr	SF Snoqualmie R	07.0456	culvert	RND	OTH	1.45	1.45		0	Outfall/Slope	NG	1.1	no
Northwest	I-90	28.32	Unnamed	Kimball Cr	07	culvert	RND	PCC	0.76	0.76	125.00	0	Slope/Outfall	RR	1.1	no
Northwest	I-90	28.85	Unnamed	Unn.	07	culvert	RND	CST	0.61	0.61	97.71	0	Outfall/Slope	NG	1.1	no
Northwest	I-90	29.74	Unnamed	Kimball Cr	07.0454	culvert	RND	CST	0.61	0.61	100.80	0	Slope/Outfall	NG	1.1	no
Northwest	I-90	30.45	Unnamed	SF Snoqualmie R	07.0469C	culvert	RND	CST	1.68	1.68	176.81	0	Slope	RR	1.1	no
Northwest	I-90	38.19	Unnamed	SF Snoqualmie R	07	culvert	RND	CST	0.91	0.91	136.06	0	Slope	RR	1.1	no
Northwest	I-90	38.67	Unnamed	SF Snoqualmie R	07.0492	culvert	ELL	SPS	2.10	2.28	172.37	33	Slope	RR	1.1	no
Northwest	I-90	38.83	Unnamed	SF Snoqualmie R	07.0493	culvert	RND	SPS	1.52	1.52	172.37	0	Slope/Outfall	RR	1.1	no
Northwest	I-90	42.18	Mason Cr	Snoqualmie R	07.0499	culvert	SQSH	SPS	2.25	1.79	118.90	0	Slope/Outfall	RR	1.1	no
Northwest	I-90	43.12	Unnamed	SF Snoqualmie R	07	culvert	RND	CST	1.22	1.22	97.34	33	Slope	RR	1.1	no
Northwest	I-90	45	Unnamed	SF Snoqualmie R	07	culvert	RND	PCC	0.91	0.91	72.37	0	Slope/Outfall	NG	1.1	no
Northwest	I-90	48.09	Humpback Cr	SF Snoqualmie R	07.0512	culvert	BOX	CPC	3.38	2.49	61.85	0	Slope/Outfall	RR	1.2	no
Northwest	I-90	48.66	Unnamed	SF Snoqualmie	07	culvert	BOX	CPC	3.15	2.45	31.40	0	Slope	NG	1.2	no
Northwest	I-90	52.12	Unnamed	SF Snoqualmie R	07	culvert	RND	CAL	1.66	1.66	113.95	33	Slope/Outfall	NG	1.1	no
Northwest	I-90 Ext 47	0.08	Unnamed	SF Snoqualmie R	07	culvert	RND	SPS	1.89	1.89	26.15	0	Outfall/Slope	RR	1.1	no
Northwest	I-90 EB	28.52	Unnamed	Kimball Cr	07.0461	culvert	RND	CAL	0.61	0.61	44.84	0	Outfall/Undersized	RR	1.1	no
Northwest	I-90 EB	46.24	Talapus Cr	SF Snoqualmie R	07.0508	culvert	BOX	PCC	3.06	1.87	35.75	0	Slope	RR	1.2	no
Northwest	I-90 EB	46.3	Talapus Cr	SF Snoqualmie R	07.0508	culvert	BOX	CPC	3.04	1.84	29.30	33	Slope	UD	1.2	no
Northwest	I-90 Exit 27	0.15	Unnamed	Coal Cr	07	culvert	RND	CST	0.76	0.76	175.00	0	Outfall/Depth	NG	1.1	no
Northwest	I-90 EXT 31	0.13	Unnamed	SF Snoqualmie R	07.0469	culvert	BOX	CPC	1.85	1.22	123.73	33	Velocity	RR	1.1	no
Northwest	I-90 Ext 42 WB	0.07	Mason Cr	SF Snoqualmie R	07.0499	culvert	RND	CST	1.87	1.87	41.51	33	Slope	RR	1.1	no
Northwest	I-90 Ext 45	0.23	Unnamed	SF Snoqualmie R	07	culvert	RND	CST	1.52	1.52	85.34	0	Slope	NG	1.1	yes/om
Northwest	I-90 Ext 47	0.17	Unnamed	SF Snoqualmie R	07	culvert	RND	CST	1.89	1.89	50.60	0	Slope	RR	1.1	no
Northwest	I-90 EXT42	0.02	Unnamed	SF Snoqualmie R	07	culvert	RND	CST	1.22	1.22	216.00	0	Undersized	RR	1.1	no
Northwest	I-90 WB	28.56	Unnamed	Kimball Cr	07.0461	culvert	RND	CAL	0.91	0.91	69.36	0	Slope/Outfall	RR	1.1	no
Northwest	I-90 WB	47.35	Unnamed	SF Snoqualmie R	07	culvert	RND	CST	1.52	1.52	105.51	0	Outfall/Slope	NG	1.1	no
Northwest	Pratt Lk Yard		Unnamed	SF Snoqualmie R	07	culvert	RND	CST	0.76	0.76	114.16	0	Outfall/Slope	NG	1.1	no
Northwest	SR 104	25.7	Willow Cr	Puget Sound	08.0011	culvert	BOX	PCC	1.83	0.91	152.40	0	Slope/Outfall	RR	1.1	
Northwest	SR 104	30.6	Unnamed	Lyon Cr to	08.0053	culvert	RND	CST	0.76	0.76	18.90	33		RR	1.1	
Northwest	SR 104	31.3	Lyon Cr	Lk Washington	08.0052	culvert	BOX	PCC	1.37	1.83	59.44	50	Velocity	RR	1.1	

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Northwest	SR 11	18.62	Unnamed	Chuckanut Cr	01.0627	culvert	RND	PCC	0.61	0.61	50.17	0	Slope	RR	1.1	no
Northwest	SR 161	33.46	EF Hylebos Cr	Hylebos Cr	10	culvert	RND	PCC	0.45	0.45	33.14	0	Outfall/Undersized	NG	1.1	no
Northwest	SR 161	34.6	Unnamed	Puget Sound	10.0013	culvert	RND	PCC	0.61	0.61				UD	1.1	
Northwest	SR 161		Unnamed	EF Hylebos Cr	10.0015	culvert	RND	PCC	0.65	0.65	41.00	33	Slope	RR	1.1	
Northwest	SR 164	9.1	Second Cr	White R	10.0050	culvert	RND	PCC	1.22	1.22	36.58	0	Outfall/Slope	RR	1.1	
Northwest	SR 164	13.34	Unnamed Ditch	Boise Cr	10	culvert	RND	PCC	1.22	1.22	26.82	33	Slope/Velocity	NG	1.1	
Northwest	SR 167	23.64	Up Springbrook Cr	Springbrook Cr	09.0020	culvert	RND	CST	1.12	1.12		67	Slope/Undersized	UD	1.1	
Northwest	SR 167	26.1	Unnamed	Green R	09	culvert	BOX	PCC	0.91	0.91				UD	1.1	
Northwest	SR 169	5.3	Unnamed	Green R	08	culvert	BOX	PCC	0.76	0.76	228.60	50		UD	1.1	
Northwest	SR 18	18.19	Taylor Cr	Downs Cr	08.0326	culvert	RND	PCC	1.52	1.52	29.49	67	Undersized	RR	1.1	no
Northwest	SR 18	18.43	Taylor Cr	Downs Cr (Cedar R)	08.0326	culvert	RND	PCC	1.52	1.52	44.30	20	Slope	RR	1.1	no
Northwest	SR 18	22.12	Holder Cr	Issaquah Cr	08.0178A	culvert	BOX	PCC	3.05	3.35	66.45	0	Slope/Outfall	RR	1.1	
Northwest	SR 18	25.8	Deep Cr	Raging R	07.0396	fishway		BC				33				
Northwest	SR 18	27.62	Lake Cr	Raging R	07.0393	culvert	RND	PCC	1.07	1.07	24.46	33	Slope/Velocity	RR	1.2	
Northwest	SR 20	44.88	Unnamed	Skagit Bay	03.0159	culvert	RND	PCC						UD	1.1	
Northwest	SR 20	50.65	Fornsby Sl	Swinomish Ch	03.0153	other								UD		
Northwest	SR 20	52.34	Unnamed	Padilla Bay	03.0116	other								UD		
Northwest	SR 20	61.76	Gages Sl	Skagit R	03.0224	culvert	RND	CST	0.45	0.45	30.00			UD	1.1	
Northwest	SR 20	62.18	Gages Sl	Skagit R	03.0224	culvert	RND	CST	0.45	0.45	30.00			UD	1.1	
Northwest	SR 20	70.3	Unnamed	Coal Cr	03.0279A	culvert	BOX	PCC	1.98	2.13	18.29	50		UD	1.1	
Northwest	SR 20	70.9	Unnamed	Skagit R	03	culvert	RND	PCC	0.61	0.61	23.77	10		UD	1.1	
Northwest	SR 20	84.7	Unnamed	Skagit R	04.0434	culvert	RND	PCC	0.61	0.61		0		UD	1.1	
Northwest	SR 20	86.1	Ebing Cr	Skagit R	04	culvert	RND	PCC	0.61	0.61	23.60			UD	1.1	
Northwest	SR 20	87.4	Unnamed	Skagit R	03	culvert	RND	PCC	0.61	0.61	17.07	0		UD	1.1	
Northwest	SR 20	87.7	Lornezan Cr	Skagit R	04	culvert	RND	PCC	0.61	0.61	22.90	67	Undersized	RR	1.1	yes/fp
Northwest	SR 20	88.77	Unnamed	Lornezan Cr	04	culvert	RND	PCC	0.61	0.61	36.60		Slope	UD	1.1	
Northwest	SR 20	89.9	Unnamed	Skagit R	03	culvert	RND	CST	0.91	0.91	45.72	0	Slope/Outfall	UD	1.1	
Northwest	SR 20	90	Unnamed	Skagit R	03	culvert	RND	PCC	0.46	0.46	39.62	0	Slope	UD	1.1	
Northwest	SR 20	93	Unnamed	Skagit R	04.0647	culvert	RND	CST	0.61	0.61	44.88	0	Outfall/Slope	NG	1.1	no
Northwest	SR 20	93.21	Unnamed	Skagit R	04	culvert	RND	CPC	1.76	1.76	34.82	0	Slope/Outfall	NG	1.1	no
Northwest	SR 20	93.29	Unnamed	Skagit R	04	culvert	RND	CST	1.21	1.21	50.03	0	Slope/Outfall	NG	1.1	
Northwest	SR 20	93.7	Unnamed	Skagit R	04	culvert	RND	CST	1.87	1.87	48.98	0	Slope/Outfall	NG	1.1	
Northwest	SR 20	93.84	Unnamed	Skagit R	04.0649	culvert	RND	PCC	0.61	0.61	16.51	67	Slope	RR	1.2	no
Northwest	SR 20	94.1	Unnamed	Skagit R	04.0650	culvert	BOX	PCC	1.52	0.91	25.46	33	Slope/Outfall	RR	1.2	no
Northwest	SR 20	94.47	Unnamed	Skagit R	04.0654	culvert	RND	CST	0.76	0.76	36.82	0	Slope/Undersized	RR	1.1	no
Northwest	SR 20	94.68	Unnamed	Skagit R	04.0655	culvert	RND	CST	1.83	1.83	59.15	0	Slope	NG	1.1	no
Northwest	SR 20	94.82	Unnamed	Skagit R	04.0657	culvert	RND	CST	1.83	1.83	92.26	0	Slope/Outfall	RR	1.1	no
Northwest	SR 20	96.12	Unnamed	Skagit R	04.0671	culvert	RND	PCC	0.46	0.46	15.02	67	Depth/Undersized	RR	1.1	no

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Northwest	SR 20	96.23	Unnamed	Skagit R	04.0672	culvert	RND	PCC	0.91	0.91	24.02	0	Slope	RR	1.1	no
Northwest	SR 20	99.9	Sutter Cr	Skagit R	04.1345	culvert	RND	PCC	1.52	1.52	23.77	0	Outfall/Slope	RR	1.1	
Northwest	SR 20	105.44	Olson Cr	Skagit R	04.1407	culvert	SQSH	CST	3.80	2.60	20.00	67	Slope	RR	1.1	
Northwest	SR 20	110.95	Cub Cr	Bacon Cr	04.1774A	culvert	RND	CST	1.22	1.22	48.77	33	Velocity	RR	1.1	
Northwest	SR 20	112.5	Unnamed	Skagit R	03	culvert	RND	CST	0.91	0.91				UD	1.1	
Northwest	SR 20	112.9	Unnamed	Skagit R	03	culvert	RND	CST	0.91	0.91	13.11	25	Outfall	UD	1.1	
Northwest	SR 20	114.91	Unnamed	Skagit R	04.1826	culvert	SQSH	CST	1.60	1.20	14.00		Outfall	UD	1.1	
Northwest	SR 20	116.25	Unnamed	Skagit R	04	culvert	RND	CST	0.90	0.90	28.00			UD	1.1	
Northwest	SR 20	117.57	Unnamed	Newhalem Ponds	04	culvert	RND	CST	1.05	1.05	22.00		Slope	UD	1.2	
Northwest	SR 20	118.52	Babcock Cr	Skagit R	04.1862	culvert	RND	CST	0.90	0.90	15.00		Slope/Undersized	UD	1.2	
Northwest	SR 20		Unnamed	Skagit R	04.0176X	culvert	RND	PCC	0.62	0.62	94.50	0	Slope/Undersized	RR	1.1	no
Northwest	SR 202	5.3	Unnamed	L Washington	08.0101	culvert	RND	PCC	1.22	1.22	48.77	0	Outfall/Slope	UD	1.1	
Northwest	SR 203	0.21	Unnamed	Unn. to Ebey Sl	07	culvert	RND	OTH	0.76	0.76	59.00	0	Outfall/Slope	RR	1.1	no
Northwest	SR 203	3.97	Unnamed	Griffin Cr	07	culvert	RND	PCC	0.46	0.46	16.83	67	Slope/Depth	UD	1.1	no
Northwest	SR 203	4.37	Unnamed	Snoqualmie R	07	culvert	RND	OTH	0.61	0.61	49.21	33	velocity/Slope	RR	1.1	
Northwest	SR 203	5.1	Unnamed	Unn. to Snoqualmie R	07	culvert	rnd	PCC	0.61	0.61	25.96	67	Slope	UD	1.1	no
Northwest	SR 203	7.26	Unnamed	Horseshoe Lk	07	culvert	RND	OTH	0.61	0.61	23.65	33	Slope	UD	1.1	no
Northwest	SR 203	11.93	Unnamed	Unn.	07	culvert	RND	PCC	0.61	0.61	13.89	33	Slope	UD	1.1	no
Northwest	SR 203	13.6	Unnamed	Snoqualmie R	07.0219A	culvert	RND	PCC	1.22	1.22	45.36	67	Slope	RR	1.1	no
Northwest	SR 203	14.1	Unnamed	Snoqualmie R	07	culvert	RND	PCC	0.61	0.61	15.26	33	Slope	UD	1.1	no
Northwest	SR 203	18.19	Unnamed	Snoqualmie R	07	culvert	RND	PCC	0.91	0.91				UD	1.1	
Northwest	SR 203	18.48	Unnamed	Snoqualmie R	07.0238	culvert	RND	PCC	0.91	0.91	52.54	33	Slope	UD	1.1	no
Northwest	SR 204	0.54	Unnamed	Ebey Sl	07	culvert	RND	PCC	1.30	1.30	67.25	33	Slope	RR	1.1	no
Northwest	SR 204	0.96	Unnamed	Ebey Sl	07	culvert	RND	PCC	0.46	0.46	49.11	0	Outfall/Slope	RR	1.1	no
Northwest	SR 204	1.19	Unnamed	Ebey Sl	07.0093	culvert	RND	PCC	0.91	0.91	76.72	0	Slope/Depth	RR	1.1	no
Northwest	SR 204	1.64	Unnamed		07	culvert	RND	PCC	0.46	0.46	31.72	33	Slope	NG	1.1	no
Northwest	SR 204	1.8	Unnamed	Ebey Sl	07	culvert	RND	PCC	0.91	0.91	60.93	0	Slope	RR	1.1	no
Northwest	SR 410	27.44	Boise Cr	White R	10.0057	culvert	BOX	PCC	1.83	1.83	32.61	67	Slope	RR	1.2	
Northwest	SR 410	35.77	Clay Cr	White R	10.0103	culvert	BOX	PCC	1.83	1.83	38.40	0	Outfall/Slope	RR	1.1	no
Northwest	SR 410	36.49	Cyclone Cr	White R	10.0105	culvert	BOX	PCC	2.44	2.44	28.65	0	Slope	RR	1.1	
Northwest	SR 410	39.19	Unnamed	White R	10	culvert	RND	PCC	0.76	0.76	17.00	0	Outfall/Slope	NG	1.1	
Northwest	SR 410	41.52	Unnamed	White R	10	culvert	RND	PCC	0.90	0.90	14.70		Slope	UD	1.1	yes/fp
Northwest	SR 410	48.31	Boundary Cr	White R	10.0250	culvert	RND	PCC	1.25	1.25	31.00		Slope break	UD	1.1	yes/om
Northwest	SR 410	49.93	Unnamed	White R	10	culvert	RND	CST	1.22	1.22		67		NG	1.1	
Northwest	SR 410	50.4	Unnamed	White R	10	culvert	BOX	PCC	1.52	1.52		0		UD	1.1	
Northwest	SR 410	55.28	Dry Cr	White R	10.0310	culvert	BOX	CPC	1.55	1.55	87.00		Outfall/Slope	UD	1.1	
Northwest	SR 410	55.51	Unnamed	White R	10	culvert	BOX	PCC	1.68	1.83	37.19	0	Slope/Outfall	RR	1.1	
Northwest	SR 410	59.6	Unnamed	White R	10	culvert	RND	PCC	0.75	0.75	13.00		Slope	UD	1.2	

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Northwest	SR 410		Unnamed	Boise Cr	10	culvert			0.00	0.00				UD	1.1	
Northwest	SR 503	42.11	Unnamed	Lk Merwin	27.0398	culvert	RND	PCC	0.76	0.76	35.06	0	Slope/Outfall	RR	1.1	no
Northwest	SR 509	9.58	Unnamed	Puget Sound	09	culvert	RND	PCC	0.85	0.85	121.92	50	Slope	NG	1.2	
Northwest	SR 509	13.42	Unnamed	Duamish R	09	culvert	RND	CST	1.07	1.07	38.10	0	Slope/Outfall	UD	1.1	
Northwest	SR 509	20.35	Des Moines Cr	Puget Sound	09.0377	culvert	BOX	PCC	1.22	1.83	72.54	33	Slope	RR	1.1	
Northwest	SR 520	4.48	Unnamed	Lk Washington	08.0257	culvert	RND	CST	1.52	1.52	58.44	67	Slope	RR	1.1	no
Northwest	SR 520	5.42	Unnamed	Lk Washington	08	culvert	RND	CST	0.91	0.91	98.70	0	Outfall/Slope	NG	1.1	no
Northwest	SR 520	5.81	Unnamed	Lk Washington	08	culvert	RND	PCC	1.27	1.27	104.01	0	Slope	RR	1.1	no
Northwest	SR 520	6.04	Yarrow Cr	Lk Washington	08.0252	culvert	RND	CST	1.22	1.22	60.76	67	velocity	RR	1.2	no
Northwest	SR 520	6.19	Yarrow Cr	Lk Washington	08.0252	culvert	RND	PCC	1.07	1.07	78.68	67	Depth	RR	1.2	no
Northwest	SR 520	6.44	Unnamed	Yarrow Cr	08	culvert	RND	CST	0.91	0.91	111.96	0	Outfall/Slope	RR	1.1	yes/om
Northwest	SR 520	8	Goff Cr	Lk Washington	08.0257	culvert	RND	CST	0.91	0.91		0	Outfall	UD	1.2	
Northwest	SR 520 off ramp	6.03	Yarrow Cr	Lk Washington	08.0252	culvert	RND	CST	1.22	1.22	62.42	67	Velocity	RR	1.1	no
Northwest	SR 520 off ramp	6.27	Yarrow Cr	Lk Washington	08.0252	culvert	SQSH	CST	1.07	0.75	33.37	67	Slope	RR	1.1	no
Northwest	SR 520 on ramp	5.95	Yarrow Cr	Lk Washington	08.0252	culvert	RND	CST	1.22	1.22	29.80	67	Depth	RR	1.2	no
Northwest	SR 520 on ramp	5.95	Yarrow Cr	Lk Washington	08.0252	culvert	RND	CST	1.22	1.22	38.20	67	Depth	RR	1.2	no
Northwest	SR 522	2.00	Maple Leaf Cr	Thorton Cr	08.0033	culvert	BOX	CPC	1.59	1.85	64.10	0	Slope/Outfall	RR	1.1	no
Northwest	SR 522	2.86	Thornton Cr	Lk Washington	08.0030	fishway		BC				67				
Northwest	SR 522	6.63	Unnamed	Lk Washington	08.0056	culvert	BOX	PCC	0.91	1.83	200.56	0	Outfall/Slope	RR	1.1	
Northwest	SR 522	14.25	Howell Cr	Little Bear Cr	08.0082	culvert	RND	OTH	0.46	0.46	55.61	0	Slope/Undersized	RR	1.2	no
Northwest	SR 522	14.38	Unnamed	Little Bear Cr	08	culvert	RND	PCC	0.46	0.46	56.54	33	Slope	NG	1.1	no
Northwest	SR 522	16.54	Unnamed	Crystal Lk	08	culvert	RND	PCC	0.91	0.91	53.37	67	Undersized	RR	1.1	no
Northwest	SR 522	17.48	Unnamed	Evans Cr	07.0211	culvert	RND	PCC	0.76	0.76	55.00	33	Velocity	RR	1.1	no
Northwest	SR 522	17.82	Unnamed	Evans Cr	07.0211	culvert	RND	PCC	0.91	0.91	88.10	67	velocity/length	RR	1.1	no
Northwest	SR 522	17.87	Unnamed	Evans Cr	07.0211	culvert	RND	PCC	0.91	0.91	54.40	67	velocity/length	RR	1.1	no
Northwest	SR 522	18.44	Unnamed	Evans Cr	07.0211	culvert	RND	CST	1.25	1.25	44.33	33	Undersized	RR	1.1	no
Northwest	SR 522	18.77	Unnamed	Evans Cr	07	culvert	RND	PCC	0.61	0.61	45.72	33	Slope	RR	1.1	
Northwest	SR 522	19.26	Anderson Cr	Evans Cr	07.0212	culvert	RND	PCC	0.90	0.90	116.00	0	Slope/Velocity	RR	1.1	no
Northwest	SR 522	19.35	Unnamed	Anderson Cr	07	culvert	RND	CST	0.91	0.91	84.33	0	Outfall/Slope	RR	1.1	no
Northwest	SR 522	19.44	Unnamed	Anderson Cr	07	culvert	RND	CST	0.76	0.76		0	Slope	RR	1.1	no
Northwest	SR 522	19.57	Unnamed	Anderson Cr	07	culvert	RND	CST	0.91	0.91	90.78	0	Slope	RR	1.1	no
Northwest	SR 522	20.21	Elliott Cr	Snohomish R	07.0214	culvert	RND	PCC	0.90	0.90	117.00	0	Slope	RR	1.1	no
Northwest	SR 522	21.95	Unnamed	Skykomish R	07.0814	culvert	RND	CST	0.61	0.61	46.72	67	Velocity	RR	1.1	yes/fp
Northwest	SR 522	21.97	Unnamed	Skykomish R	07.0814	culvert	RND	CST	0.76	0.76	48.26	67	Slope	RR	1.1	no
Northwest	SR 524	4.01	Scriber Cr	Scriber Lk	08.0000	culvert	SQSH	CST	1.80	1.10	39.84	67	Sheetflow	RR	1.2	yes/om
Northwest	SR 524	5.54	Golde Cr	Scriber Cr	08.0062	culvert	RND	PCC	0.91	0.91	4.66	0	Outfall/Slope	RR	1.1	no
Northwest	SR 524	6.95	Martha Cr	Swamp Cr	08	culvert	RND	OTH	0.91	0.91		0	Undersized	RR	1.1	yes/fp
Northwest	SR 524	9.1	Unnamed	North Cr	08	culvert	RND	PCC	0.46	0.46	14.94	0	Slope/Undersized	RR	1.1	no

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WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Northwest	SR 524	12.25	Unnamed	Little Bear Cr	08	culvert	RND	CPC	0.46	0.46	Olympic		Slope	UD	1.1	
Northwest	SR 524	12.29	Unnamed	Little Bear Cr	08	culvert	RND	CST	0.61	0.61	7.00		Slope	UD	1.1	
Northwest	SR 524	12.46	Great Dane Cr	Little Bear Cr	08.0084	culvert	BOX	CPC	2.13	0.98	10.00		Slope	UD	1.1	yes/om
Northwest	SR 526	2.96	Merrill & Ring Cr	Possession Sound	07.1725	culvert	RND	CST	1.07	1.07	161.62	33	Slope	NG	1.1	no
Northwest	SR 527	2.78	Unnamed	North R	08	culvert	RND	CST	1.22	1.22	65.98	33	Slope/Undersized	RR	1.1	no
Northwest	SR 530	24	Unnamed	NF Stillaguamish R	05	culvert	RND	CST	0.91	0.91	51.82	10	Slope	NG	1.1	
Northwest	SR 530	24.25	Unnamed	NF Stillaguamish R	05.0136	culvert	RND	SST	1.52	1.52	3.05	0	Outfall/Slope	NG	1.1	
Northwest	SR 530	24.7	Unnamed	Stillaguamish R	05.0137	culvert	RND	PCC	1.22	1.22	56.39	0	Outfall/Slope	RR	1.1	
Northwest	SR 530	25.7	Unnamed	NF Stillaguamish R	05.0148	culvert	RND	PCC	0.46	0.46	19.81	50	Undersized	RR	1.1	
Northwest	SR 530	26.25	Unnamed	NF Stillaguamish R	05.0147X	culvert	RND	PCC	0.46	0.46	23.47	80	Outfall/Slope	NG	1.1	
Northwest	SR 530	26.4	Unnamed	Stillaguamish R	05.0147	culvert	RND	PCC	0.46	0.46	17.07	0	Outfall/Slope	RR	1.1	
Northwest	SR 530	26.66	Unnamed	NF Stillaguamish R	05.0151X	culvert	RND	PCC	0.76	0.76	24.69	0	Outfall/Slope	RR	1.1	
Northwest	SR 530	26.7	Unnamed	NF Stillaguamish R	05.0151X	culvert	RND	PCC	0.91	0.91	18.59	10	Undersized	RR	1.1	
Northwest	SR 530	27.45	Unnamed	NF Stillaguamish R	05.0150	culvert	RND	PCC	0.76	0.76	17.07	0	Outfall	RR	1.1	
Northwest	SR 530	27.65	Unnamed	NF Stillaguamish R	05.0152X	culvert	RND	PCC	0.46	0.46	20.12	70	Slope/Undersized	NG	1.1	
Northwest	SR 530	27.75	Ryan Falls Cr	Stillaguamish R	05.0152	culvert	RND	CST	1.43	1.43	23.77	20	Slope	NG	1.1	
Northwest	SR 530	34.3	Unnamed	Fry Cr	05.0213X	culvert	RND	PCC	0.61	0.61	22.86	50	Slope	RR	1.1	
Northwest	SR 530	35.2	Unnamed	Montaque Cr	05.0217X	culvert	RND	PCC	0.46	0.46	10.36	80	Velocity	RR	1.1	
Northwest	SR 530	38.6	Unnamed	NF Stillaguamish R	05	culvert	RND	PCC	0.61	0.61		75	Slope/Velocity	NG	1.1	
Northwest	SR 530	38.7	Unnamed	NF Stillaguamish R	05	culvert	RND	PCC	0.61	0.61	22.86	0		UD	1.1	
Northwest	SR 530	42.2	Little French Cr	Fortson Cr	05.0253	culvert	RND	PCC	1.22	1.22	47.55	0	Outfall	RR	1.2	
Northwest	SR 530	43	Fortson Cr	NF Stillaguamish R	05.0254	culvert	ARCH	CST	0.91	1.52	30.48	0	Outfall/Slope	RR	1.1	
Northwest	SR 530	52.33	Unnamed	Sauk R	04.1090	culvert	RND	PCC						UD	1.1	
Northwest	SR 530	54.58	Lyle Cr	Sauk R	04.1067	culvert	BOX	PCC	2.40	1.50	18.00			UD	1.1	
Northwest	SR 530	64.6	Unnamed	Skagit R	03	culvert	RND	PCC	1.34	1.34	15.24	50		NG	1.1	
Northwest	SR 531	2.6	Fish Cr (lk Ki outlet)	Portage Cr	05.0038	culvert	RND	CST	0.61	0.61	26.52	75	Slope/Velocity	UD	1.1	
Northwest	SR 532	9.75	Unnamed	Pilchuck Cr	05.0065	culvert	RND	PCC	1.22	1.22	61.00	33	Slope	RR	1.1	no
Northwest	SR 534	3.58	Unnamed	Unn. Bulson Cr	03.0200	culvert	RND	SPS	0.46	0.46	12.19	0		NG	1.1	no
Northwest	SR 534	4.9	Unnamed	Skagit R	03	culvert	RND	CST	0.46	0.46	14.33	0	Slope/Outfall	UD	1.2	
Northwest	SR 539	0.3	Baker Cr	Squalicum Cr	01.0553	culvert	RND	OTH	0.91	0.91	54.35	0	Slope	RR	1.1	no
Northwest	SR 539	4.3	Deer Cr	Tenmile Cr	01.0165	culvert	BOX	PCC	1.22	1.37	14.63	33	Slope	RR	1.1	
Northwest	SR 539	11.1	Unnamed	Unn. to Bertrand Cr	01	culvert	RND	PCC	1.22	1.22	17.07	0	Slope	UD	1.2	
Northwest	SR 542	2.4	Toad Lk Cr	Squalicum Cr	01.0560	culvert	RND	PCC	1.55	1.55	62.48	0	Outfall/Slope	RR	1.1	
Northwest	SR 542	14.1	Unnamed	Nooksack R	01	culvert	RND	PCC	0.70	0.70	40.84	0	Slope	NG	1.1	
Northwest	SR 542	15.05	Unnamed	NF Nooksack R	01	culvert	RND	PCC	0.91	0.91	19.20	50	Slope	RR	1.2	
Northwest	SR 542	16.1	Unnamed	Nooksack R	01	culvert	RND	PCC	0.91	0.91	13.41	0	Slope	UD	1.1	
Northwest	SR 542	16.3	Unnamed	Nooksack R	01.0337	culvert	RND	PCC	1.07	1.07	30.48	50		NG	1.1	
Northwest	SR 542	17.85	Unnamed	NF Nooksack R	01	culvert	RND	PCC	0.91	0.91	18.29	0	Slope	NG	1.1	



## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Northwest	SR 542	19.6	Unnamed	Nooksack R	01	culvert	RND	PCC	0.91	0.91				UD	1.1	
Northwest	SR 542	23.94	Unnamed	High Cr (Kendall Cr)	01.0408	culvert	RND	CST	0.61	0.61	12.50	10	Slope	UD	1.2	
Northwest	SR 542	24.5	Unnamed	(High Cr) Kendall Cr	01.0407X	culvert	RND	CST	0.61	0.61	16.46	75		UD	1.1	
Northwest	SR 542	24.9	High Cr	Kendall Cr	01.0407	culvert	RND	CST	1.89	1.89	15.24	33	Slope	RR	1.1	
Northwest	SR 542	27.18	Unnamed	Nooksack R	01	culvert	RND	PCC	0.61	0.61	19.81	33	Slope/Outfall	RR	1.1	
Northwest	SR 542	27.72	Unnamed	NF Nooksack R	01	culvert	RND	PCC	0.30	0.30	10.06	10		UD	1.1	
Northwest	SR 542	28.72	Baptist Camp Cr	NF Nooksack R	01.0433	culvert	RND	PCC	0.45	0.45	12.53	33	Slope/Undersized	RR	1.1	yes/fp
Northwest	SR 542	29	Unnamed	NF Nooksack R	01	culvert	RND	PCC	0.46	0.46		0		RR	1.1	
Northwest	SR 542	29.62	Unnamed	NF Nooksack R	01.0434	culvert	RND	PCC	1.52	1.52		0		NG	1.1	
Northwest	SR 542	29.7	Unnamed	NF Nooksack R	01	culvert	RND	PCC	0.46	0.46		0		NG	1.1	
Northwest	SR 542	29.8	Unnamed	NF Nooksack R	01	culvert	RND	PCC	0.30	0.30		0		NG	1.1	
Northwest	SR 542	29.9	Unnamed	NF Nooksack R	01	culvert	RND	PCC	0.30	0.30		0		NG	1.1	
Northwest	SR 542	31.4	Unnamed	NF Nooksack R	01	culvert	RND	PCC	0.91	0.91		0		NG	1.1	
Northwest	SR 542	32	Hedrick Cr	Nooksack R	01.0463	culvert	BOX	PCC	1.83	1.83	24.38	0	Slope	RR	1.2	
Northwest	SR 542	34.56	Unnamed	NF Nooksack R	01	culvert	RND	PCC	0.76	0.76	19.81	0	Outfall/Slope	RR	1.1	
Northwest	SR 542	36.6	Unnamed	NF Nooksack R	01	culvert	RND	CST	1.22	1.22		0		NG	1.1	
Northwest	SR 542	38.38	Unnamed	NF Nooksack R	01	culvert	RND	CST	0.91	0.91	18.29	0	Slope/Outfall	UD	1.1	
Northwest	SR 542	38.9	Unnamed	NF Nooksack R	01	culvert	RND	PCC	1.83	1.83		0		NG	1.1	
Northwest	SR 548	4.7	Terrell Cr	Birch Bay	01.0089	culvert	RND	PCC	1.83	1.83	40.78	33	Slope/Outfall	RR	1.1	no
Northwest	SR 548	6.34	Terrell Cr	Birch Bay	01.0089	culvert	RND	SPS	3.73	3.73	35.20	33	Outfall/Slope	RR	1.1	yes/fp
Northwest	SR 548	6.34	Terrell Cr	Birch Bay	01.0089	culvert	RND	SPS	3.73	3.73	35.20	33	Outfall/Slope	RR	1.2	no
Northwest	SR 548	6.34	Terrell Cr	Birch Bay	01.0089	culvert	RND	SPS	Southv	3.55	35.20	33	Outfall/Velocity	RR	1.1	yes/fp
Northwest	SR 548	6.34	Terrell Cr	Birch Bay	01.0089	culvert	RND	SPS	Southv	3.55	35.20	33	Outfall/Velocity	RR	1.2	no
Northwest	SR 9	0.17	Howell Cr	Little Bear Cr	08.0082	culvert	RND	OTH	0.91	0.91	80.00	0	Velocity	RR	1.1	no
Northwest	SR 9	0.91	Unnamed	Little Bear Cr	08	culvert	RND	CAL	0.40	0.40	Eastern		Slope	UD	1.1	no
Northwest	SR 9	0.94	Unnamed	Little Bear Cr	08	culvert	RND	CAL	0.46	0.46	9.00		Slope	UD	1.1	yes/fp
Northwest	SR 9	0.98	Unnamed	Little Bear Cr	08	culvert	RND	PCC	0.43	0.43	14.00		Slope	UD	1.1	yes/om
Northwest	SR 9	1.19	Cutthroat Cr	Little Bear Cr	08.0083	culvert	RND	PCC	7.32	7.32	20.00		Velocity	UD	1.1	no
Northwest	SR 9	18.79	Unnamed	Unn.	07	culvert	RND	OTH	0.61	0.61	87.72	0	Slope	RR	1.1	no
Northwest	SR 9	22.72	Unnamed	Quilceda Cr	07	culvert	RND	PCC	0.46	0.46	25.95			UD	1.1	no
Northwest	SR 9	24.44	MF Quilceda Cr	Quilceda Cr	07.0058	culvert	RND	PCC	1.52	1.52	51.92	67	Slope	UD	1.1	no
Northwest	SR 9	25.75	Unnamed	Unn.	07	culvert	RND	PCC	0.91	0.91	35.21	0	Outfall	UD	1.1	no
Northwest	SR 9	35.45	Unnamed	Unn. to Pilchuck R	05.0080B	culvert	RND	CST	1.00	1.00	17.00	67	Slope	RR	1.1	no
Northwest	SR 9	38.6	Unnamed	Stillaquamish R	05.0080H	culvert	RND	PCC	0.61	0.61		50	Slope	RR	1.1	
Northwest	SR 9	38.68	Unnamed	05.0080	05.0080X	culvert	RND	PCC	0.31	0.31	11.70	67	Slope	NG	1.1	no
Northwest	SR 9	38.7	Unnamed	05.0080	05.0080X	culvert	RND	PCC	0.31	0.31	11.70	67	Slope	NG	1.1	no
Northwest	SR 9	41.07	Norway Park Cr	Lk Mc Murray	03.0265	culvert	RND	CST	0.76	0.76	36.58	33	Slope	RR	1.1	
Northwest	SR 9	41.5	Unnamed	lk Cr	03.0264	culvert	RND	CST	1.21	1.21	16.21	33	Slope/Undersized	NG	1.1	no

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Northwest	SR 9	48	Gribble Cr	WF Nookachamps Cr	03.0227	culvert	RND	PCC	1.22	1.22	21.14	33	Slope/Velocity	RR	1.1	no
Northwest	SR 9	49	Unnamed	WF Nookachamps Cr	03.0227X	culvert	BOX	CPC	1.22	1.50	11.10	67	Slope	NG	1.1	no
Northwest	SR 9	59.15	Unnamed	Unn. to Hansen Cr	03	culvert	RND	PCC	0.61	0.61	12.40			UD	1.1	
Northwest	SR 9	63.74	Unnamed	Samish R	03.0005X	culvert	RND	PCC	0.91	0.91	18.00			UD	1.1	
Northwest	SR 9	65.3	Unnamed	Samish R	03.0073	culvert	RND	PCC	1.22	1.22	14.94	60		UD	1.1	
Northwest	SR 9	67.04	Unnamed	Samish R	03	culvert	RND	PCC	0.62	0.62	15.10			UD	1.2	
Northwest	SR 9	68.75	Unnamed	Samish R	03	culvert	RND	CST	0.91	0.91	19.00			UD	1.1	
Northwest	SR 9	68.88	Unnamed	Samish R	03	culvert	RND	PCC	0.61	0.61	17.00			UD	1.1	
Northwest	SR 9	68.99	Unnamed	Samish R	03	culvert	RND	PCC	0.61	0.61	19.50			UD	1.1	
Northwest	SR 9	70.6	Unnamed	Nooksack R	01.0263	culvert	RND	PCC	0.76	0.76	13.72	0	Slope/Outfall	NG	1.1	
Northwest	SR 9	70.8	Unnamed	Nooksack R	01	culvert	RND	PCC	0.91	0.91	21.34	0	Slope	RR	1.2	no
Northwest	SR 9	76.91	Unnamed	Black Sl (Nooksack)	01	culvert	RND	PCC	0.70	0.70	35.19	0	Slope	RR	1.1	no
Northwest	SR 9	77.12	Black Sl	SF Nooksack R	01.0250	culvert	RND	PCC	0.70	0.70	18.37	67	Slope break	RR	1.1	yes/fp
Northwest	SR 9	77.43	Unnamed	Unn. (SF Nooksack R)	01	culvert	RND	PCC	0.70	0.70	10.72	67	DS end failing	RR	1.1	yes/fp
Northwest	SR 9		Unnamed	Nooksack R	01	culvert	RND	PCC	0.61	0.61				UD	1.1	
Northwest	SR 9		Unnamed	Lk McMurray	03.0227X	culvert	RND	PCC	0.46	0.46	18.00			UD	1.1	
Northwest	SR 9		Unnamed	lk Cr	03.0227X	culvert	RND	CST	0.91	0.91	12.00			UD	1.1	
Northwest	SR 9		Unnamed	lk Cr	03.0227X	culvert	SQSH	CST	0.74	0.46	30.00			UD	1.1	
Northwest	SR 9		unnamed	Lk McMurray	03.0227X	culvert	RND	CAL	1.22	1.22	14.30			UD	1.1	
Northwest	SR 9		Unnamed	Samish R	03.0069	culvert	RND	CST	1.22	1.22	12.60			UD	1.1	
Northwest	SR 9		Unnamed	Samish R	03.0005X	culvert	RND	PCC	0.91	0.91	9.50			UD	1.1	
Northwest	SR 900	15.86	Green Cr	May Cr	08.0288	culvert	BOX	PCC	1.22	0.91	13.72	0	Slope/Velocity	RR	1.1	
Northwest	SR 900	19.4	Unnamed	Tibbetts Cr	08.0175	culvert	BOX	PCC	0.91	0.91	11.58	40	Slope	NG	1.1	
Northwest	SR 900	20.09	Unnamed	Tibbetts Cr	08.0172	culvert	BOX	PCC	0.91	1.22	10.97	30	Outfall/Slope	RR	1.1	
Northwest	SR 900	20.34	Unnamed	Tibbetts Cr	08.0171	culvert	BOX	PCC	0.94	1.52	10.67	0	Outfall/Slope	RR	1.1	
Northwest	SR 92	0.22	Unnamed	Stevens Cr	07	culvert	RND	PCC	0.91	0.91	41.96			UD	1.1	yes/fp
Northwest	SR 92	0.47	Stevens Cr	lk Stevens	07.0147	culvert	RND	PCC	0.91	0.91	26.21	0	Slope/Outfall	RR	1.1	
Northwest	SR 92	0.78	Unnamed	Steven's Lk	07.0150	culvert	RND	OTH	0.61	0.61	64.83	67	Velocity	RR	1.1	no
Northwest	SR 92	1.93	Catherine Cr	Stevens Cr	07.0148	fishway		BC				67				
Northwest	SR 92	7.78	Unnamed	Unn. pond	07	culvert	RND	CST	0.69	0.69	36.22	33	Slope	NG	1.1	no
Northwest	SR 99	51.45	Unnamed	Swamp Cr	08	culvert	RND	CAL	0.76	0.76	175.00	0	Undersized	RR	1.1	no
Northwest	SR 99	52.63	Swamp Cr	Sammamish R	08.0059	culvert	BOX	CPC	1.21	1.27	37.74	67	Slope/Velocity	RR	1.1	yes/fp
Northwest	US 2	3.59	Unnamed	Unn. to Ebey Sl	07	culvert	RND	CST	0.91	0.91	94.61	0	Slope	NG	1.1	no
Northwest	US 2	12.94	Unnamed	French Cr	07.0193	culvert	BOX	CPC	3.08	2.60	41.04	67	Outfall	RR	1.1	no
Northwest	US 2	18.25	Unnamed	Skykomish R	07	culvert	RND	OTH						UD	1.1	
Northwest	US 2	19.3	Unnamed	Skykomish R	07	culvert	RND	PCC	0.61	0.61	36.58			UD	1.1	
Northwest	US 2	23.08	Wagley's Cr	Skykomish R	07.0939	fishway		WP				33				
Northwest	US 2	34.35	Unnamed	Skykomish R	07	culvert	RND	PCC	1.22	1.22	20.85	0	Slope	RR	1.2	no

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Northwest	US 2	36.73	Unnamed	SF Skykomish R	07	culvert	RND	CST	1.07	1.07	79.32	0	Slope	NG	1.1	no
Northwest	US 2	44.26	Unnamed	SF Skykomish R	07	culvert	RND	PCC	1.22	1.22	25.41	33	Slope	NG	1.1	no
Northwest	US 2	47.75	Unnamed	SF Skykomish R	07	culvert	RND	PCC	1.51	1.51	15.98	33	Slope	NG	1.1	no
Northwest	US 2	48.94	Unnamed	SF Skykomish R	07	culvert	RND	PCC	1.22	1.22	15.37	0	Slope/Outfall	RR	1.1	no
Northwest	US 2	49.87	Unnamed	SF Skykomish R	07	culvert	OTH	OTH	1.22	1.22	46.64	0	Outfall/Undersized	RR	1.1	no
Northwest	US 2	52.39	Unnamed	Tye R	07	culvert	RND	CST	1.22	1.22	35.25	33	Slope	RR	1.1	no
Northwest	US 2	52.47	Unnamed	Tye R	07	culvert	RND	PCC	0.91	0.91	23.91	33	Slope	NG	1.1	no
Northwest	US 2	52.7	Unnamed	Tye R	07	culvert	RND	PCC	1.22	1.22	17.69	33	Slope	RR	1.1	no
Northwest	US 2	52.75	Unnamed	Tye R	07	culvert	RND	PCC	0.91	0.91	22.98	33	Slope	NG	1.1	no
Northwest	US 2	54.9	Unnamed	Tye R	07.1631	culvert	BOX	CPC	2.17	1.85	28.76	33	Slope/Outfall	NG	1.1	no
Northwest	US 2	56.19	Unnamed	Tye R	07	culvert	RND	CST	0.91	0.91	29.23	0	Slope/Depth	NG	1.1	no
Northwest	US 2	56.86	Unnamed	Tye R	07	culvert	RND	CST	0.61	0.61	53.82	0	Slope/Undersized	NG	1.1	no
Northwest	US 2	57.66	Unnamed	Tye R	07	culvert	RND	CST	0.61	0.61	47.18	0	Slope/Undersized	NG	1.1	no
Northwest	US 2	58	Unnamed	Tye R	07.1695	culvert	RND	PCC	0.91	0.91	30.08	0	Slope	NG	1.1	no
Northwest	US 2	59.62	Unnamed	Tye R	07.1705	culvert	RND	CST	0.76	0.76	36.03	0	Slope/Undersized	NG	1.1	no
Northwest	US 2	64.32	Unnamed	Unn. to Tye R	07	culvert	BOX	CPC	1.30	1.30	49.49	0	Slope/Outfall	UD	1.1	no
Northwest	US 2	64.46	Unnamed	Tye R	07.1716	culvert	BOX	CPC	1.85	1.85	56.24	0	Slope/Velocity	UD	1.1	no
Northwest			Unnamed	SF Snoqualmie R	07	culvert		TMB			7.30	33	Outfall/Slope	NG	1.1	no
Northwest			Unnamed	Lk McMurray	03.0227X	culvert	RND	PCC	0.90	0.90	12.00		Slope	UD	1.1	
Olympic	105SP West	32.78	Unnamed	Grays Harbor	22.1390	culvert	OTH	OTH	0.91	0.91	39.10			UD	1.2	no
Olympic	I-5	105.85	Indian Cr	Moxlie Cr	13.0026	culvert	RND	CST	0.91	0.91	100.58	0	Slope/Velocity	RR	1.1	
Olympic	I-5	106.8	Indian Cr	Moxlie Cr	13.0026	culvert	RND	CST	0.91	0.91	85.34	0		RR	1.1	
Olympic	SR 104	4.25	Unnamed	Barnhouse Cr	17.0213b3	culvert	RND	CST	0.76	0.76	93.88	33	Length/Slope	RR	1.1	yes/om
Olympic	SR 104	5.75	Unnamed	Chimacum Cr	17.0212	culvert	RND	CAL	0.80	0.80	52.81	33	Slope	RR	1.1	no
Olympic	SR 104	12.05	Unnamed	Hood Canal	17	culvert	RND	CST	0.63	0.63	65.51	0	Slope	NG	1.1	no
Olympic	SR 104	12.57	Unnamed	Squamish Harbor	17	culvert	RND	CST	0.91	0.91	103.33	0	Length/Slope	RR	1.1	no
Olympic	SR 104	12.7	Unnamed	Squamish Harbor	17.0185	culvert	RND	CAL	0.70	0.70	60.48	0	Slope/Outfall	RR	1.1	no
Olympic	SR 104	16.55	Unnamed	Hood Canal	15	culvert	RND	PCC	0.91	0.91	39.62	50	Slope	RR	1.1	
Olympic	SR 104	17.82	Unnamed	Port Gamble	15	culvert	BOX	PCC	0.92	0.92	33.21	0	Slope	RR	1.1	no
Olympic	SR 104	19.39	Unnamed	Port Gamble	15	culvert	RND	PCC	0.76	0.76	30.21	0	Slope	RR	1.1	no
Olympic	SR 104	22.47	Grovers Cr	Miller Bay	15.0299	culvert	BOX	CPC	0.95	0.95	19.30	33		UD	1.1	no
Olympic	SR 104	22.95	Unnamed	Appletree Cove	15	culvert	BOX	CPC	0.92	0.92	23.60	0	Slope	RR	1.1	no
Olympic	SR 104	23.32	Unnamed	Apple Tree Cove	15	culvert	RND	PCC	0.45	0.45	24.91	0	Slope/Outfall	NG	1.1	no
Olympic	SR 105	31.38	Unnamed	South Bay	22.1321	culvert	RND	PCC	1.07	1.07	21.19	33	Slope/Tidegate	RR	1.1	yes/om
Olympic	SR 105	31.79	Unnamed	South Bay	22	culvert	RND	PCC	0.65	0.65	29.37	0	Slope	NG	1.1	no
Olympic	SR 105	36.26	Unnamed	South Bay	22	culvert	RND	PCC	0.61	0.61	48.39	33	Slope/Undersized	NG	1.1	no
Olympic	SR 105	38.1	Unnamed	Johns R	22	culvert	RND	PCC	0.61	0.61	38.10	0	Slope/Undersized	RR	1.1	no
Olympic	SR 105	38.28	Unnamed	Johns R	22	culvert	RND	PCC	0.46	0.46	22.86	33	Slope/Undersized	NG	1.1	no

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Olympic	SR 105	38.9	Unnamed	Grays Harbor	22.1269	culvert	RND	PCC	0.76	0.76	59.50	0	Slope/Undersized	NG	1.1	no
Olympic	SR 105	40.5	Unnamed	South Bay	22	culvert	RND	PCC	1.07	1.07	73.15	0	Slope/Depth	NG	1.1	yes/fp
Olympic	SR 105	41.76	Unnamed	Grays Harbor	22	culvert	RND	PCC	0.46	0.46	23.25	0	Outfall/Undersized	NG	1.1	yes/om
Olympic	SR 106	0.85	Skobob Cr	Skokomish R	16.0004	culvert	BOX	PCC	1.83	1.83	20.16	67	Undersized	RR	1.1	no
Olympic	SR 106	2.95	Unnamed	Skokomish R	16.0002	culvert	RND	PCC	0.91	0.91	12.19	0	Outfall/Slope	RR	1.1	
Olympic	SR 106	6.95	Dalby Cr	Hood Canal	14	culvert	RND	OTH	0.60	0.60	17.81	0	Slope/Undersized	RR	1.1	
Olympic	SR 106	13.84	Unnamed	Hood Canal	14.0131	culvert	BOX	PCC	1.22	1.04	14.94	0	Stream drop	UD	1.2	
Olympic	SR 107	0.76	Unnamed	Little North R	24	culvert	RND	CAL	0.75	0.75	29.19	67	Slope/Undersized	RR	1.1	yes/om
Olympic	SR 107	3.29	Unnamed	Preachers Sl	22	culvert	RND	PCC	0.61	0.61	19.55	67	Slope	NG	1.1	no
Olympic	SR 107	5.49	Unnamed	Chehalis R	22	culvert	RND	PCC	0.46	0.46	27.43	0	Outfall/Undersized	NG	1.1	no
Olympic	SR 108	0.18	Unnamed	EF Wildcat Cr	22	culvert	RND	PCC	0.76	0.76	16.43	67	Slope/Depth	RR	1.1	no
Olympic	SR 108	7.6	Unnamed	Skookum Cr	14.0020A	culvert	RND	CST	1.52	1.52	16.15	0	Outfall/Slope	RR	1.1	
Olympic	SR 109	2.71	Unnamed	Grays Harbor	22	culvert	RND	PCC	0.46	0.46	15.84	67		RR	1.1	no
Olympic	SR 109	3.41	Unnamed	Grays Harbor	22	culvert	RND	PVC	0.61	0.61	42.37	33	Slope	RR	1.1	yes/om
Olympic	SR 109	13.39	Unnamed	Kurtz Sl	22	culvert	RND	OTH	0.83	0.83	48.27	33	Slope	NG	1.1	no
Olympic	SR 109	26.1	Unnamed	Pacific Ocean	21.0764	culvert	RND	SST	1.22	1.22	22.00	0	Slope	RR	1.1	
Olympic	SR 109	26.11	Unnamed	Pacific Ocean	21	culvert	RND	PCC	0.61	0.61		50		UD	1.1	
Olympic	SR 109	33.1	Unnamed	Pacific Ocean	21.0728	culvert	RND	PCC	1.52	1.52	45.72	0	Slope/Velocity	RR	1.1	no
Olympic	SR 109	33.1	Unnamed	Pacific Ocean	21.0728	culvert	RND	PCC	1.52	1.52	45.72	0	Slope/Velocity	RR	1.1	no
Olympic	SR 109	33.4	Unnamed	Pacific Ocean	21.0000B	culvert	RND	PCC	1.22	1.22	29.26	0	Outfall/Slope	RR	1.2	
Olympic	SR 109	35.6	Unnamed	Pacific Ocean	21.0718	culvert	RND	PCC	0.61	0.61	17.98	0	Outfall/Slope	RR	1.1	
Olympic	SR 109	36.3	Unnamed	Pacific Ocean	21.0716	culvert	RND	PCC	1.07	1.07	16.46	0	Slope	RR	1.1	
Olympic	SR 109	37.1	Unnamed	Pacific Ocean	21	culvert	RND	PCC	0.91	0.91	31.70	20	Slope	UD	1.1	
Olympic	SR 109	39.2	Unnamed	Pacific Ocean	21	culvert	RND	PCC	1.07	1.07	30.48	0	Slope/Outfall	UD	1.1	
Olympic	SR 112	10.95	Unnamed	Unn. to Straits	19	culvert	RND	PCC	0.61	0.61	18.29	0	Slope	NG	1.1	
Olympic	SR 112	12.3	Unnamed	Hoko R	19.0148A	culvert	RND	PCC	0.61	0.61	15.24	0	Outfall/Slope	RR	1.1	
Olympic	SR 112	21.1	Unnamed	Green Cr (Pysht R)	19.0121	culvert	RND	CST	1.52	1.52	19.81	0	Outfall/Slope	RR	1.1	
Olympic	SR 112	24.91	Unnamed	Pysht R	19.0113K	culvert	RND	PCC	0.91	0.91	17.06	0	Slope/Outfall	RR	1.2	no
Olympic	SR 112	29.1	Indian Cr	Juan de Fuca	19.0112	culvert	RND	CST	0.61	0.61	39.62	0	Slope	RR	1.1	
Olympic	SR 112	29.7	Unnamed	Butler Cr	19	culvert	RND	PCC	0.76	0.76	44.20	0	Slope	RR	1.1	no
Olympic	SR 112	29.71	Butler Cr	Butler Cove	19.0112	culvert	RND	PCC	0.76	0.76	47.24	0	Outfall/Slope	RR	1.1	no
Olympic	SR 112	32	Jim Cr	Juan de Fuca	19.0110	fishway		BC				67				
Olympic	SR 112	32.8	Joe Cr	Juan de Fuca	19.0109	culvert	RND	CST	1.52	1.52	35.36	60	Outfall/Slope	RR	1.2	
Olympic	SR 112	35.75	Unnamed	Juan de Fuca	19	culvert	RND	CST	1.22	1.22	19.81	0	Outfall	NG	1.1	
Olympic	SR 112	43.7	Unnamed	Murdock Cr	19	culvert	RND	PCC	0.61	0.61	45.11	0	Outfall/Slope	NG	1.2	
Olympic	SR 112	47.1	Nelson Cr	Lyre R	19.0032	culvert	BOX	PCC	1.52	1.83	28.65	0	Slope/Velocity	RR	1.1	
Olympic	SR 112	49.5	Whiskey Cr	Juan de Fuca	19.0020	culvert	BOX	PCC	2.13	1.83	51.82	60	Slope	RR	1.1	
Olympic	SR 112	52.9	Unnamed	Salt Cr (Straits)	19.0012	culvert	RND	CST	1.52	1.52	36.58	67	Slope	RR	1.1	

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Olympic	SR 112	54.35	Bear Cr	Salt Cr	19.0014	culvert	BOX	PCC	1.83	1.22	16.42	33	Undersized	RR	1.1	
Olympic	SR 112	56.5	Unnamed	Coville Cr (Straits)	19.0003	culvert	BOX	PCC	2.44	2.44	51.82	0	Slope	RR	1.1	
Olympic	SR 112	57.6	Coville Cr	Juan de Fuca	19.0001	culvert	RND	PCC	1.22	1.22	39.93	0		RR	1.2	
Olympic	SR 113	0.9	Unnamed	Beaver Cr	20.0325	culvert	RND	CST	1.22	1.22	64.01	10	Slope	RR	1.1	
Olympic	SR 119	3.98	Unnamed	Skokomish R	16	culvert	RND	CST	1.25	1.25	10.40	33	Slope/Undersized	RR	1.1	
Olympic	SR 16	14.63	Unnamed	McCormick Cr	15	culvert	RND	PCC	0.76	0.76	131.10	0	Slope	RR	1.1	no
Olympic	SR 16	14.86	McCormick Cr	Henderson Bay	15.0065	culvert	RND	OTH	1.22	1.22	67.11	33	Undersized	RR	1.1	yes/om
Olympic	SR 16	15.018	Unnamed	McCormick Cr	15.0066	culvert	RND	CST	0.46	0.46	78.60	0	Slope/Undersized	RR	1.1	no
Olympic	SR 16	19.54	Unnamed	Burley Cr	15	culvert	RND	PCC	0.91	0.91	82.91	0	Outfall/Slope	RR	1.1	
Olympic	SR 16	20.36	Unnamed	Burley Cr	15.0058	culvert	RND	PCC	1.07	1.07	45.72	30	Slope	RR	1.1	
Olympic	SR 16	22.7	Burley Cr	Henderson Bay	15.0056	culvert	RND	PCC	1.37	1.37	137.16	67	Slope	UD	1.1	
Olympic	SR 16	26.8	Ross Cr	Sinclair Inlet	15.0209	culvert	RND	PCC	0.76	0.76	76.20	70	Slope/Velosity	RR	1.1	
Olympic	SR 16	27.1	Unnamed	Ross Cr	15.0210	culvert	RND	CST	1.22	1.22	140.21	0	Slope	RR	1.1	
Olympic	SR 16	28.6	Unnamed	Sinclair Inlet	15.0215	culvert	RND	PCC	0.76	0.76		0		UD	1.1	
Olympic	SR 16 Ext 15	15.21	McCormick Cr	Henderson Bay	15.0065	culvert	RND	CST	1.52	1.52	57.12	33	Slope	RR	1.1	no
Olympic	SR 160	4.5	Unnamed	Curley Cr	15.0186	culvert	RND	SST	0.76	0.76		0		UD	1.1	
Olympic	SR 162	4.82	Ball Cr	Puyallup R	10.0405	culvert	RND	OTH	0.45	0.45	18.35	67	Slope	RR	1.2	no
Olympic	SR 162		Rauch Cr	Carbon R	10	culvert	RND	CST	0.75	0.75	14.70		slope	RR	1.1	yes/fp
Olympic	SR 162		Unnamed	South Prairie Cr	10	culvert	RND	PCC	0.90	0.90	60.00		Outfall	RR	1.1	yes/fp
Olympic	SR 165	19.76	Spiketon Cr	South Prairie Cr	10.0449	culvert	BOX	CPC	1.20	1.23	11.40		Slope	RR	1.1	yes/fp
Olympic	SR 19	4.3	Swansonville Cr	EF Chimacum	17.0205A	culvert	RND	PCC	0.61	0.61	24.38	0	Slope/Outfall	RR	1.1	
Olympic	SR 3	21.29	Unnamed	Case Inlet	15	culvert	RND	CST	0.45	0.45	40.38	33	Slope/Undersized	NG	1.1	no
Olympic	SR 3	23.94	Unnamed	Hood Canal	15	culvert	RND	PCC	0.60	0.60	24.23	0	Slope	RR	1.1	no
Olympic	SR 3	26.4	Unnamed	Union R	15.0504	culvert	RND	PCC	1.20	1.20	169.00	0	Slope/Length	RR	1.1	no
Olympic	SR 3	29.63	Unnamed	Union R	15.0512	culvert	BOX	PCC	1.22	1.22	13.72	0	Slope/Outfall	RR	1.1	
Olympic	SR 3	32.1	Gorst Cr	Sinclair Inlet	15.0216	culvert	BOX	CPC	1.25	1.25	53.00	33	Slope	RR	1.1	no
Olympic	SR 3	32.1	Gorst Cr	Puget Sound	15.0216	culvert/ dam	RND	CAL	0.60	0.60	6.10	33/0	Slope	RR	1.1	no
Olympic	SR 3	34.6	Unnamed	Gorst Cr	15.0217	culvert	RND	PCC	0.91	0.91				UD	1.1	
Olympic	SR 3	40.5	Chico Cr	Dyes Inlet	15.0229	fishway		BC				67				
Olympic	SR 3	40.51	Unnamed	Chico Cr	15	culvert	RND	CAL	0.61	0.61		33	Outfall	UD	1.1	
Olympic	SR 3	44.6	Unnamed	Strawberry Cr	15.0247	culvert	RND	CST	1.22	1.22	93.88	0	Outfall/Slope	RR	1.1	
Olympic	SR 3	46.09	Unnamed	Clear Cr	15	culvert	RND	CST	0.60	0.60	112.73	33	Slope/Undersized	RR	1.1	no
Olympic	SR 3	50.87	SF Johnson Cr	Johnson Cr	15.0282	culvert	RND	CST	0.91	0.91	182.88	0	Outfall/Slope	RR	1.1	
Olympic	SR 3	50.95	MF Johnson Cr	Liberty Bay	15.0283	culvert	RND	CST	1.52	1.52	121.92	0	Slope	RR	1.1	
Olympic	SR 3	52.21	Johnson Cr	Liberty Bay	15.0283	culvert	RND	CST	0.92	0.92	67.37	0	Slope	RR	1.1	no
Olympic	SR 3	57.23	Unnamed	Kinman Cr	15.0367	culvert	RND	PCC	0.76	0.76		0	Slope	RR	1.1	
Olympic	SR 3	57.87	Unnamed	Hood Canal	15	culvert	RND	PCC	0.61	0.61		10		UD	1.1	

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Olympic	SR 3	58.21	Unnamed	Hood Canal	15	culvert	RND	PCC	0.61	0.61	27.43	0	Slope	RR	1.1	
Olympic	SR 3	58.48	Spring Cr	Hood Canal	15.0364	culvert	RND	PCC	0.91	0.91	33.20	0	Slope/Undersized	RR	1.1	no
Olympic	SR 3	59.5	Unnamed	Hood Canal	15.0361	culvert	RND	PCC	0.61	0.61		0		UD	1.1	
Olympic	SR 302	0.6	Unnamed	Case Inlet	14.0108	culvert	RND	PCC	0.91	0.91	18.29	60	Slope/Outfall	UD	1.1	
Olympic	SR 302	0.9	Unnamed	Coulter Cr	15.0001	culvert	RND	CST	0.76	0.76	25.91	0	Slope/Outfall	RR	1.1	
Olympic	SR 302	2.4	Unnamed	Case Inlet	15.0000A	culvert	RND	PCC	0.30	0.30	12.80	0	Outfall/Slope	UD	1.2	
Olympic	SR 302	2.5	Unnamed	Case Inlet	15.0014	culvert	RND	CST	0.91	0.91	12.80	0	Slope/Outfall	UD	1.1	
Olympic	SR 302	4.6	Unnamed	Case Inlet	15	culvert	RND	PCC	0.91	0.91	12.80	0	Slope	UD	1.1	
Olympic	SR 305	0.38	Unnamed	Eagle Harbor	15.0324	culvert	RND	OTH	1.22	1.22	103.78	0	Slope	RR	1.1	no
Olympic	SR 305	0.73	Unnamed	Eagle Harbor	15.0324	culvert	RND	PCC	0.76	0.76	49.69	0	Slope/Outfall	NG	1.1	no
Olympic	SR 305	2.44	Unnamed	Murden Cove	15.0321	culvert	BOX	CPC	1.52	1.22	46.41	33	Undersized	RR	1.1	no
Olympic	SR 305	3.73	Unnamed	Murden Cove	17.0344	culvert	RND	PCC	0.76	0.76	39.68	0	Slope/Outfall	NG	1.1	no
Olympic	SR 305	7.28	Klebeal Cr	Agate Pass	15.0296	culvert	RND	PCC	1.22	1.22	61.35	0	Slope	RR	1.1	no
Olympic	SR 305	8.94	Unnamed	Liberty Bay	15.0293	culvert	RND	PCC	0.91	0.91	89.27	0	Slope/Outfall	RR	1.2	yes/om
Olympic	SR 305	9.6	Unnamed	Liberty Bay	15.0291	culvert	RND	PCC	0.91	0.91	70.10	0	Outfall	RR	1.2	
Olympic	SR 305	9.88	Bjorgen Cr	Liberty Bay	15.0290	culvert	RND	PCC	0.91	0.91	39.62	0	Outfall/Slope	RR	1.1	no
Olympic	SR 305	11.62	Unnamed	Puget Sound	15	culvert	RND	PCC	0.61	0.61	36.58	0		RR	1.1	
Olympic	SR 305	12.29	Unnamed	Dogfish Cr	15	culvert	RND	PCC	0.91	0.91	31.70	0	Slope	RR	1.1	
Olympic	SR 307	0.07	Dogfish Cr	Liberty Bay	15.0286	culvert	RND	PCC	1.50	1.50	16.77	67	Undersized	RR	1.1	no
Olympic	SR 307	0.49	Unnamed	Dogfish Cr	15	culvert	RND	PCC	1.21	1.21	14.68	33	Velocity	RR	1.1	yes/om
Olympic	SR 307	0.98	Unnamed	Unn. To Dogfish Cr	15	culvert	RND	PCC	0.45	0.45	16.53	0	Slope/Velocity	RR	1.1	no
Olympic	SR 307	0.98	Unnamed	Unn. To Dogfish Cr	15	culvert	RND	PCC	0.30	0.30	9.52	0	Outfall/Slope	RR	1.1	no
Olympic	SR 307	1.32	Unnamed	Dogfish Cr	15.0286	culvert	RND	CST	1.21	1.21	21.42	33	Undersized	RR	1.1	yes/om
Olympic	SR 307	1.45	Unnamed	Dogfish Cr	15.0286	culvert	RND	CST	1.21	1.21	33.82	33	Slope/Outfall	RR	1.1	no
Olympic	SR 307	2.5	Unnamed	Gamble Cr	15.0358	culvert	RND	OTH	0.45	0.45	336.00	0	Slope/Undersized	RR	1.1	no
Olympic	SR 308	1.15	Big Scandia Cr	Liberty Bay	15.0280	fishway		BC				67				
Olympic	SR 308	1.33	Little Scandia Cr	Liberty Bay	15.0279	culvert	RND	CST	1.05	1.05	100.26	0	Slope	RR	1.1	no
Olympic	SR 507	8.9	Unnamed	Chehalis R	23	culvert	RND	CST	1.52	1.52				UD	1.1	
Olympic	SR 510	5.85	Unnamed	McAllister Cr	11.0328	culvert	RND	PCC	0.61	0.61	100.58	80	Slope	RR	1.1	
Olympic	SR 510	6.2	Unnamed	Nisqually R	11	culvert	RND	CST	0.61	0.61				UD	1.1	
Olympic	SR 7	19.15	Unnamed	Alder Lk	11	culvert	RND	PCC	0.91	0.91		0		NG	1.1	
Olympic	SR 7	21.3	Unnamed	Alder Lk	11	culvert	RND	PCC	0.91	0.91	36.58	20	Slope	RR	1.2	
Olympic	SR 7	21.35	Unnamed	Alder Lk	11	culvert	RND	PCC	0.61	0.61		0		NG	1.1	
Olympic	SR 7	21.6	Unnamed	Alder Lk	11	culvert	BOX	PCC	1.52	1.52				UD	1.1	
Olympic	SR 7	22.8	Unnamed	Alder Lk	11	culvert	RND	PCC	0.76	0.76	25.91	10	Slope/Velocity	RR	1.1	
Olympic	SR 7	23.3	Unnamed	Nisqually R	11	culvert	BOX	PCC	1.52	1.52		0		NG	1.1	
Olympic	SR 7	24.8	Unnamed	Nisqually R	11	culvert	RND	CST	0.76	0.76		0		NG	1.1	
Olympic	SR 706	8	Unnamed	Nisqually R	11	culvert	BOX	PCC	0.91	1.52		0		UD	1.1	



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WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Olympic	SR 706	8.05	Unnamed	Nisqually R	11.0008A	culvert	BOX	PCC	1.52	1.52	11.28	50	Slope	UD	1.1	
Olympic	SR 706	9.8	Unnamed	Nisqually R	11.0222	culvert	BOX	PCC	0.91	1.22		0		UD	1.1	yes/om
Olympic	SR 8	0.1	Unnamed	Cloquallum Cr	22	culvert	RND	CST	0.91	0.91	72.78	33	Slope/Undersized	RR	1.1	no
Olympic	SR 8	1.27	Unnamed	Cloquallum Cr	22	culvert	RND	PCC	0.46	0.46	50.75	67	Undersized	RR	1.1	no
Olympic	SR 8	1.37	Unnamed	Unn. to Cloquallum Cr	22	culvert	RND	PCC	0.46	0.46	#####	33	Undersized	NG	1.1	no
Olympic	SR 8	3.16	Unnamed	Wildcat Cr	22	culvert	RND	CST	1.30	1.30	62.33	0	Slope	RR	1.1	no
Olympic	SR 8	3.51	Unnamed	Wildcat Cr	22	culvert	RND	CST	0.91	0.91	51.77	0	Slope	RR	1.1	no
Olympic	SR 8	3.72	Unnamed pond	Wildcat Cr	22	culvert	RND	CST	0.76	0.76	72.00	0	Outfall	RR	1.1	
Olympic	SR 8	6.1	Unnamed	EF Wildcat Cr	22	culvert	RND	CST	0.91	0.91	46.13	67	Depth	RR	1.1	no
Olympic	SR 8	6.3	EF Wildcat Cr	Cloquallum R	22.0503	culvert	BOX	CPC	3.06	2.43	89.97	33	Velocity/Depth	RR	1.2	no
Olympic	SR 8	9.1	Unnamed	Mox Chehalis Cr	22	culvert	BOX	CPC	1.22	1.22	42.77	33	Slope	RR	1.1	no
Olympic	SR 8	12.15	Unnamed	Kennedy Cr	14	culvert	BOX	PCC	0.91	1.22	30.48	0	Slope/Outfall	RR	1.1	
Olympic	SR 8	12.16	Unnamed	Kennedy Cr	14	culvert	BOX	PCC	0.91	1.22	31.09	0	Slope	RR	1.1	
Olympic	SR 8	13.3	Unnamed	Kennedy Cr	14	culvert	BOX	PCC	1.83	1.83	94.49	0	Slope	NG	1.1	
Olympic	SR 8	13.5	Unnamed	Kennedy Cr	14.0015	culvert	BOX	PCC	1.52	2.13	88.39	0	Slope	RR	1.2	
Olympic	SR 8	14.1	Unnamed	Kennedy Cr	14	culvert	BOX	PCC	1.22	1.83	457.20	33	Slope	RR	1.1	
Olympic	SR 8	14.8	Unnamed	Kennedy Cr	14	culvert	RND	PCC	0.76	0.76	46.94	33	Outfall/Slope	RR	1.2	
Olympic	SR 8	15	Unnamed	Kennedy Cr	14	culvert	RND	PCC	0.76	0.76	62.48	20	Sheetflow	NG	1.2	
Olympic	SR 8	15.2	Unnamed	Kennedy Cr	14	culvert	BOX	PCC	0.91	1.83	57.00	0	Slope	RR	1.1	
Olympic	SR 8	16.6	Unnamed	Kennedy Cr	14	culvert	BOX	PCC	0.61	0.61	18.29	0	Slope/Outfall	UD	1.1	
Olympic	SR 8	17.2	Unnamed	Perry Cr	14	culvert	BOX	PCC	1.22	1.83	60.96	40	Slope	RR	1.1	
Olympic	SR 8	18.2	Unnamed	Perry Cr	14	culvert	RND	PCC	0.91	0.91	24.38	0	Outfall/Slope	UD	1.1	
Olympic	SR 8	18.55	Unnamed	Perry Cr	14	culvert	RND	PCC	0.91	0.91	60.96	0	Slope/Outfall	NG	1.1	
Olympic	SR 8	18.95	Unnamed	Perry Cr	14	culvert	RND	PCC	0.91	0.91	15.24	0	Outfall/Slope	NG	1.1	
Olympic	SR 8	18.96	Unnamed	Perry Cr	14	culvert	RND	PCC	0.91	0.91	18.29	0	Slope/Outfall	NG	1.1	
Olympic	US 101	68.99	Unnamed	Lower Salmon Cr	24.0106	culvert	RND	PCC	0.76	0.76	34.75	67	Slope	RR	1.2	no
Olympic	US 101	71.02	Joe Cr	North R	24.0129	culvert	BOX	CPC	1.52	1.52	50.49	67	Outfall/Slope	RR	1.2	no
Olympic	US 101	73.35	Unnamed	Unn. to North R	24	culvert	ARCH	CPC	0.90	1.00	51.16	33	Slope	RR	1.1	no
Olympic	US 101	75.05	Unnamed	Little North R	24	culvert	RND	CST	0.91	0.91	56.75	0	Outfall/Slope	RR	1.1	yes/om
Olympic	US 101	76.48	Mosquito Cr	North R	24.0137	culvert	RND	SST	1.22	1.22	38.71	67	Slope/Undersized	RR	1.1	yes/om
Olympic	US 101	80.4	Unnamed	Chehalis R	22	culvert	RND	CST	0.91	0.91	84.91	0	Slope/Undersized	NG	1.1	no
Olympic	US 101	84.15	Unnamed	Grays Harbor	22	culvert	OTH	OTH	0.61	0.61	#####	0	Tidegate	RR	1.1	no
Olympic	US 101	89.48	Unnamed	Hoquiam R	22	culvert	RND	PCC	0.61	0.61	31.07	67	Velocity	RR	1.1	no
Olympic	US 101	89.48	Unnamed	Hoquiam R	22	culvert	RND	CST	0.61	0.61	20.00	67	Outfall/Undersized	RR	1.1	no
Olympic	US 101	90.73	Unnamed	Hoquaim R	22	culvert	RND	PCC	0.61	0.61	54.26	0	Blockage	RR	1.1	
Olympic	US 101	93.49	Unnamed	WF Hoquiam R	22	culvert	RND	PCC	0.91	0.91	23.06	33	Slope	RR	1.1	no
Olympic	US 101	93.79	Unnamed	WF Hoquiam R	22	culvert	RND	PCC	0.91	0.91	24.80	0	Slope/Depth	RR	1.1	no
Olympic	US 101	95.46	Unnamed	WF Hoquiam R	22	culvert	RND	CST	0.61	0.61	27.03	0	Slope	NG	1.1	no

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Olympic	US 101	96.87	Unnamed	WF Hoquiam R	22	culvert	RND	PCC	0.91	0.91	18.29	0	Slope	NG	1.1	no
Olympic	US 101	98.47	Unnamed	WF Hoquiam R	22	culvert	RND	PCC	0.91	0.91	24.50	67	Slope	RR	1.1	no
Olympic	US 101	99.45	Unnamed	WF Hoquiam R	22	culvert	RND	PCC	0.91	0.91	24.64	67	Slope	RR	1.1	no
Olympic	US 101	100.7	Unnamed	SF Big Cr trib	22.0060	culvert	RND	PCC	0.91	0.91	31.15	67	Undersized	RR	1.1	yes/om
Olympic	US 101	100.9	Unnamed	SF Big Cr	22	culvert	RND	PCC	0.61	0.61	39.62	0	Slope	RR	1.1	
Olympic	US 101	102.14	Unnamed	SB Big Cr	22.0059	culvert	SQSH	CST	1.77	1.09	22.13	67	Velocity	RR	1.1	no
Olympic	US 101	107.42	Mopang Cr	Big Cr	22.0044	culvert	RND	PCC	0.99	0.99	31.68	67	Slope	RR	1.1	no
Olympic	US 101	110.84	Unnamed	Stevens Cr	22	culvert	RND	PCC	0.61	0.61	33.25	33	Slope	RR	1.1	no
Olympic	US 101	111.34	Unnamed	Stevens Cr	22.0064A	culvert	OTH	OTH	1.22	1.22	22.56	33	Slope	RR	1.1	
Olympic	US 101	123	Mc Calla Cr	Quinault R	21.0456	culvert	BOX	PCC	1.22	1.83	15.24	67	Slope	UD	1.1	
Olympic	US 101	123.05	McCalla Cr	Quinault R	21.0456	culvert	RND	PCC	0.91	0.91	14.02	30		RR	1.1	
Olympic	US 101	126.2	Unnamed	Quinault R	21	culvert	RND	PCC	1.37	1.37	29.87	0	Slope/Outfall	RR	1.1	
Olympic	US 101	137.35	Crane Cr	Raft R	21.0370	culvert	RND	CST	1.22	1.22	44.81	50	Slope	RR	1.1	
Olympic	US 101	142.5	Unnamed	Harlow Cr	21	culvert	RND	CST	1.22	1.22	19.51	0	Outfall/Slope	UD	1.1	
Olympic	US 101	153.8	Unnamed	Pacific Ocean	21.0015	culvert	BOX	PCC	1.52	1.52	23.77	0	Outfall/Slope	NG	1.1	
Olympic	US 101	154.5	Unnamed	Pacific Ocean	21	culvert	BOX	PCC	0.91	0.91	298.70	0	Outfall/Slope	NG	1.1	
Olympic	US 101	154.85	Unnamed	Pacific Ocean	21	culvert	BOX	PCC	1.22	1.22	39.62	75	Slope	NG	1.1	
Olympic	US 101	155.15	Unnamed	Pacific Ocean	21	culvert	BOX	PCC	1.22	1.22	39.01	0	Slope/Outfall	RR	1.2	
Olympic	US 101	155.35	Unnamed	Pacific Ocean	21.0011	culvert	BOX	PCC	1.22	1.22	38.10	0	Slope/Outfall	RR	1.2	
Olympic	US 101	156.1	Unnamed	Pacific Ocean	21	culvert	RND	PCC	1.52	1.52	21.95	0	Slope	NG	1.1	
Olympic	US 101	156.15	Unnamed	Pacific Ocean	21	culvert	RND	PCC	0.91	0.91	16.76	0	Outfall/Slope	NG	1.1	
Olympic	US 101	158.7	Unnamed	Pacific Ocean	21	culvert	BOX	PCC	1.52	1.52	34.75	0	Outfall	UD	1.1	
Olympic	US 101	159.05	Unnamed	Pacific Ocean	21	culvert	BOX	TMB	0.61	0.91	47.85	0	Debris	NG	1.1	yes/om
Olympic	US 101	159.2	Unnamed	Pacific Ocean	21	culvert	RND	PCC	0.91	0.91	60.96	80	Slope	NG	1.1	
Olympic	US 101	159.65	Unnamed	Pacific Ocean	21	culvert	BOX	PCC	1.52	1.68	60.96	0	Outfall	NG	1.1	
Olympic	US 101	160.75	Unnamed	Pacific Ocean	20	culvert	BOX	PCC	1.52	1.52	39.93	75	Slope	NG	1.1	
Olympic	US 101	161.1	Unnamed	Pacific Ocean	20	culvert	BOX	PCC	1.83	1.83	39.62	0	Outfall/Slope	NG	1.1	
Olympic	US 101	161.5	Unnamed	Pacific Ocean	20.0000A	culvert	RND	CST	1.22	1.22	56.39	0	Outfall/Slope	RR	1.1	
Olympic	US 101	163.1	Unnamed	Pacific Ocean	20	culvert	BOX	PCC	1.83	1.83	52.43	0	Outfall/Slope	NG	1.1	
Olympic	US 101	167.42	Fletcher Cr	Hoh R	20.0426	culvert	BOX	CPC	1.52	1.52	17.42	67	Slope	RR	1.1	no
Olympic	US 101	170.8	Unnamed	Hoh R	20	culvert	RND	CST	0.76	0.76	39.93	80	Slope	UD	1.1	
Olympic	US 101	174.9	Unnamed	Hoh R	20	culvert	RND	PCC	0.61	0.61		0		UD	1.1	
Olympic	US 101	175.05	Unnamed	Old Joe Sl	20	culvert	RND	CST	0.76	0.76	79.86	0	Slope	UD	1.1	
Olympic	US 101	175.2	Unnamed	Old Joe Sl	20	culvert	RND	PCC	0.61	0.61	17.37	0	Slope	UD	1.1	yes/fp
Olympic	US 101	175.45	Unnamed	Old Joe Sl	20	culvert	BOX	PCC	1.52	1.52	20.12	67		RR	1.1	
Olympic	US 101	178.3	Unnamed	Hell Roaring Cr	20	culvert	RND	CST	1.52	1.52	21.34	0	Slope	UD	1.2	
Olympic	US 101	178.6	Unnamed	Hell Roaring Cr	20	culvert	RND	CST	0.76	0.76	24.38	0	Outfall	UD	1.1	
Olympic	US 101	179.1	Unnamed	Hell Roaring Cr	20	culvert	RND	CST	1.83	1.83	30.48	0	Slope	UD	1.1	

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Olympic	US 101	179.5	Unnamed	Hell Roaring Cr	20	culvert	RND	PCC	1.22	1.22	35.05	10	Slope/Outfall	UD	1.2	
Olympic	US 101	180.2	Unnamed	Hell Roaring Cr	20	culvert	RND	PCC	0.91	0.91	42.67	0	Slope	UD	1.2	
Olympic	US 101	181.4	Unnamed	Dowans Cr	20.0248A	culvert	RND	PCC	1.22	1.22	54.86	20		RR	1.2	
Olympic	US 101	182.2	Unnamed	Bogachiel R	20	culvert	BOX	PCC	0.91	1.22	60.96	0	Slope	UD	1.1	
Olympic	US 101	182.8	Unnamed	Bogachiel R	20	culvert	RND	CST	1.22	1.22	120.09	0	Outfall	UD	1.1	
Olympic	US 101	183.1	Unnamed	Bogachiel R	20	culvert	BOX	PCC	0.98	1.22	91.44	0		UD	1.1	
Olympic	US 101	183.85	Unnamed	Bogachiel R	20	culvert	RND	PCC	0.91	0.91		0	Outfall	UD	1.1	
Olympic	US 101	184.7	May Cr	Bogachiel R	20.0247	culvert	RND	CST	3.05	3.05	58.52	67	Slope	UD	1.1	
Olympic	US 101	185.85	Unnamed	Bogachiel R	20	culvert	RND	PCC	0.61	0.61	84.73	0	Outfall	UD	1.1	yes/om
Olympic	US 101	187.35	Unnamed	Bogachiel R	20	culvert	RND	SST	0.88	0.88	84.73	0	Slope	UD	1.1	
Olympic	US 101	187.6	Unnamed	Bogachiel R	20	culvert	RND	PCC	0.61	0.61	29.87	0	Slope/Outfall	RR	1.1	
Olympic	US 101	187.8	Unnamed	Bogachiel R	20	culvert	RND	PCC	0.61	0.61	48.77	0	Slope	RR	1.1	
Olympic	US 101	188.1	Unnamed	Bogachiel R	20	culvert	RND	PCC	0.91	0.91	33.53	0	Slope	UD	1.1	
Olympic	US 101	189.2	Unnamed	Grader Cr	20	culvert	RND	PCC	0.61	0.61	24.38	40	Slope	RR	1.1	
Olympic	US 101	215	Heckel Cr	Sol Duc R	20.0344	culvert	BOX	PCC	2.44	1.83	18.29	0		UD	1.1	
Olympic	US 101	244	Dry Cr	Juan de Fuca	18.0265	culvert	BOX	PCC	2.44	2.44	24.99	0	Outfall/Slope	UD	1.1	
Olympic	US 101	247.8	Peabody Cr	Juan de Fuca	18.0245	culvert	RND	PCC	2.13	2.13	914.40	0	Slope	RR	1.1	
Olympic	US 101	249.4	White Cr	Ennis Cr	18.0235	culvert	RND	CST	1.37	1.37	243.84	0	Slope/Outfall	RR	1.1	
Olympic	US 101	250	Ennis Cr	Juan de Fuca	18.0234	fishway		BC				33		RR		
Olympic	US 101	250.5	Lees Cr	Juan de Fuca	18.0232	culvert	BOX	PCC	1.83	1.22	85.34	0	Outfall/Slope	RR	1.1	
Olympic	US 101	256.9	Unnamed	Siebert Cr	18	culvert	RND	PCC	0.65	0.65	38.39	0	Slope/Undersized	RR	1.1	yes/om
Olympic	US 101	258.07	Unnamed	McDonald Cr	18	culvert	RND	PCC	0.70	0.70	23.74	33	Undersized/Slope	NG	1.1	yes/om
Olympic	US 101	258.65	Unnamed	Unn. to Josun Ditch	18	culvert	BOX	PCC	1.65	1.65	32.46	0	Slope	NG	1.1	
Olympic	US 101	259.79	Unnamed	Josun Ditch	18	culvert	RND	PCC	0.55	0.55	37.20	0	Slope/Undersized	RR	1.1	yes/om
Olympic	US 101	260.95	Matriotti Cr	Dungeness R	18.0021	culvert/ fishway	RND	CAL/ LC	1.52	1.52		67		RR		
Olympic	US 101	262.4	Gierin Cr	Juan de Fuca	18.0029	culvert	BOX	PCC	1.83	1.83	36.58	0	Slope	UD	1.1	
Olympic	US 101	268.54	Unnamed	Sequim Bay	17.0300	culvert	RND	PCC	0.91	0.91	111.13	0	Slope/Length	RR	1.1	no
Olympic	US 101	269.24	Unnamed	Sequim Bay	17.0297	culvert	RND	PCC	0.91	0.91	44.88	0	Slope/Undersized	RR	1.1	no
Olympic	US 101	271.22	Unnamed	Sequim Bay	17	culvert	RND	PCC	0.61	0.61	33.03	67	Undersized	RR	1.1	no
Olympic	US 101	271.57	Unnamed	Sequim Bay	17.0284	culvert	RND	OTH	0.61	0.61	120.00	0	Slope/Outfall	RR	1.1	
Olympic	US 101	271.83	Unnamed	Sequim Bay	17	culvert	RND	PCC	0.61	0.61	37.69	33	Slope/Undersized	RR	1.1	
Olympic	US 101	271.98	Chicken Coop Cr	Sequim Bay	17.0278	culvert	BOX	PCC	0.91	1.22	53.34	0	Outfall/Slope	RR	1.1	
Olympic	US 101	274.3	Eagle Cr	Juan de Fuca	17.0272	culvert	RND	PCC	0.46	0.46		20	Slope	UD	1.1	
Olympic	US 101	277.9	Contractors Cr	Discovery Bay	17.0270	culvert	BOX	PCC	1.22	1.22	73.15	0	Slope/Outfall	RR	1.1	
Olympic	US 101	292.54	Leland Cr	Little Quilcene R	17.0077	culvert	BOX	CPC	2.44	1.82		33	Velocity	UD	1.1	
Olympic	US 101	303.01	Marple Cr	Jackson Cove	17.0001	culvert	ELL	CST	3.13	2.91	55.08	33	Slope	RR	1.1	no
Olympic	US 101	304.2	Turner Cr	Hood Canal	16.0559	culvert	RND	PCC	1.22	1.22	36.58	0	Outfall/Slope	UD	1.1	

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Olympic	US 101	305	Unnamed	Hood Canal	16	culvert	RND	CST	0.61	0.61				UD	1.1	
Olympic	US 101	314.1	Unnamed	Cloquallum Cr	16.0331	culvert	BOX	PCC	1.83	1.83	23.29	67	Slope/Outfall	RR	1.2	no
Olympic	US 101	314.1	Unnamed	Cloquallum Cr	16.0331	culvert	BOX	PCC	1.83	1.83	23.29	67	Slope/Outfall	RR	1.2	no
Olympic	US 101	314.3	Unnamed	Cloquallum Cr	16	culvert	RND	PCC	0.91	0.91				UD	1.1	
Olympic	US 101	314.7	Unnamed	Hood Canal	16	culvert	BOX	PCC	1.22	1.22				UD	1.1	
Olympic	US 101	317.5	Unnamed	Hood Canal	16.0325	culvert	BOX	PCC	1.22	1.22	21.03	0	Slope/Outfall	NG	1.1	
Olympic	US 101	322.47	Unnamed	Hood Canal	16	culvert	RND	OTH	0.92	0.92	49.23	0	Slope/Outfall	NG	1.1	no
Olympic	US 101	322.8	Unnamed	Hood Canal	16.0000A	culvert	RND	PCC	0.91	0.91	29.26	0	Slope/Outfall	NG	1.2	
Olympic	US 101	324.1	Unnamed	Hood Canal	16	culvert	RND	PCC	0.91	0.91	38.71	0	Slope/Velosity	RR	1.1	
Olympic	US 101	324.2	Unnamed	Hood Canal	16	culvert	RND	PCC	0.91	0.91		0		UD	1.1	
Olympic	US 101	324.3	Unnamed	Hood Canal	16	culvert	RND	PCC	0.91	0.91	36.27	0	Slope	RR	1.1	
Olympic	US 101	329.16	Unnamed	Hood Canal	16	culvert	RND	PCC	0.61	0.61	20.12	0	Outfall/Slope	NG	1.1	
Olympic	US 101	331.9	Unnamed	Hood Canal	16	culvert	RND	PCC	0.91	0.91		0		RR	1.1	
Olympic	US 101	335.9	Unnamed	Hood Canal	16.0217	culvert	RND	PCC	0.61	0.61	12.80	80	Slope	NG	1.1	
Olympic	US 101	360.6	Unnamed	Madrona Beach	14.0002A	culvert	BOX	PCC	1.83	1.83	103.94	0	Slope/Outfall	RR	1.1	
Olympic	US 101 ROW	271.22	Unnamed	Sequim Bay	17	culvert	RND	PCC	0.61	0.61	13.61	67	Slope	RR	1.1	no
Olympic	US 12	3.76	Unnamed	Unn.	22.0238	culvert	RND	PCC	0.46	0.46	31.19	33	Slope/Undersized	RR	1.1	no
Olympic	US 12	4.59	Unnamed	Max Chuck Sl	22.0253	culvert	OTH	OTH	1.14	1.14	96.45	0	Slope	RR	1.1	no
Olympic	US 12	5.24	Unnamed	Max Chuck Sl	22	culvert	RND	PCC	0.91	0.91	86.87	0	Slope	RR	1.1	
Olympic	US 12	5.38	Unnamed	Max Chuck Sl	22.0254	culvert	RND	PCC	0.91	0.91	91.44	0	Slope	RR	1.1	
Olympic	US 12	5.62	Unnamed	Mox Chuck Sl	22	culvert	RND	PCC	0.61	0.61	48.25	33	Slope	RR	1.1	no
Olympic	US 12	6.5	Unnamed	Higgins Sl	22	culvert	RND	PCC	0.76	0.76	70.10	0	Slope/Undersized	RR	1.1	no
Olympic	US 12	6.55	Unnamed	Higgins Sl	22	culvert	RND	PCC	0.61	0.61	82.91	0	Slope/Undersized	NG	1.1	no
Olympic	US 12	6.57	Unnamed	Higgins Sl	22	culvert	RND	PCC	0.76	0.76	74.68	0	Slope	RR	1.1	
Olympic	US 12	6.9	Unnamed	Higgins Sl	22.0257	culvert	RND	PCC	0.91	0.91	136.83	0	Slope	RR	1.1	no
Olympic	US 12	7.26	Unnamed	Higgins Sl	22	culvert	RND	PCC	0.91	0.91	142.34	0	Outfall/Slope	RR	1.1	no
Olympic	US 12	9.04	Unnamed	Wynoochee R	22	culvert	RND	CST	0.91	0.91		33	Undersized	RR	1.1	no
Olympic	US 12	23.3	Unnamed	Chehalis R	22	culvert	RND	PCC	0.76	0.76	20.55	67	Undersized/Depth	RR	1.2	no
Olympic	US 12	26.87	Unnamed	Chehalis R	22.0542	culvert	RND	SST	1.04	1.04	66.57	0	Outfall/Slope	RR	1.1	no
Olympic	US 12	28.2	Unnamed	Chehalis R	23	culvert	RND	PCC	0.61	0.61	91.44	0	Undersized	RR	1.1	
Olympic	US 12	28.6	Unnamed	Chehalis R	23	culvert	RND	PCC	0.91	0.91	99.06	0	Slope/Outfall	NG	1.1	yes/om
Olympic	US 12	29.19	Unnamed	Chehalis R	23	culvert	RND	PCC	0.91	0.91	54.25	0	Slope/Undersized	RR	1.1	yes/om
Olympic	US 12	29.45	Unnamed	Chehalis R	23	culvert	RND	PCC	0.91	0.91	43.89	0	Slope/Undersized	RR	1.1	no
Olympic	US 12	33.2	Unnamed	Chehalis R	23	culvert	BOX	PCC	1.22	1.22	40.23	20	Slope/Velosity	UD	1.1	
Olympic	US 12	33.4	Unnamed	Chehalis R	23	culvert	BOX	PCC	1.22	1.22	42.67	50	Slope/Velosity	UD	1.1	
Olympic	US 12	33.6	Unnamed	Chehalis R	23	culvert	RND	PCC	0.91	0.91	56.39	0	Slope	UD	1.1	
Olympic	US 12	33.9	Unnamed	Chehalis R	23	culvert	RND	PCC	0.61	0.61				UD	1.1	
S Central	I-82	26.26	Unnamed	Yakima R	39.0002A	culvert	RND	SPS	3.05	3.05	82.30	80	Slope	RR	1.1	

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
S Central	I-90	60.58	Unnamed	Keechelus Lk	39	culvert	OTH	OTH	1.96	1.85	86.50	0	Slope/Undersized	RR	1.1	no
S Central	I-90	61.34	Price Cr	Yakima R	39.1840	culvert	BOX	CPC	3.09	3.06	81.69	0	Slope/Outfall	RR	1.1	no
S Central	I-90	62.3	Unnamed	Yakima R	39	culvert	BOX	CPC	1.84	1.84	23.70	0	Slope	NG	1.1	no
S Central	I-90	62.3	Unnamed	Yakima R	39	culvert	RND	PCC	1.81	1.81	26.65	33	Slope	NG	1.1	no
S Central	I-90	62.71	Swamp Cr	Yakima R	39.1836	culvert	BOX	CPC	2.45	1.84	67.66	33	Slope/Velocity	RR	1.2	no
S Central	I-90	70.9	Silver Cr	Yakima R	39.1713	culvert	BOX	PCC	1.83	2.74	77.72	0	Slope	RR	1.2	
S Central	I-90	74.9	Unnamed	Yakima R	39	culvert	RND	CST	1.22	1.22	28.35	0	Slope/Outfall	NG	1.2	
S Central	I-90	93.35	Morrison Canyon Cr	Yakima R	39.1230	culvert	RND	SPS	1.22	1.22	79.25	33	Slope	RR	1.1	
S Central	I-90	97.3	Unnamed	Taneum Cr	39	culvert	RND	CST	0.76	0.76	106.68	0	Slope/Outfall	UD	1.1	
S Central	SR 224	0.1	Unnamed	Yakima R	37.0196	culvert	BOX	PCC	1.83	2.44	23.77	0	Slope/Outfall	RR	1.1	
S Central	SR 241	0.8	Unnamed	Sulphur Cr Wstwy	37	culvert	RND	PCC	1.22	1.22		0	Outfall	UD	1.1	
S Central	SR 261	2.6	Unnamed	Tucannon R	35	culvert								UD	1.1	
S Central	SR 410	76.1	Unnamed	American R	38	culvert								UD	1.1	
S Central	SR 410	80.2	Wash Cr	American R	38.1019	culvert	RND	PCC	1.22	1.22	29.87	0	Outfall/Slope	RR	1.2	
S Central	SR 410	82.2	Unnamed	American R	38	culvert	RND	PCC	0.61	0.61				UD	1.2	
S Central	SR 410	82.8	Survey Cr	American R	38.1041	culvert	RND	CST	3.05	3.05	34.14	0	Outfall/Slope	RR	1.1	
S Central	SR 410	91.6	Unnamed	Naches R	38	culvert	RND	PCC	0.46	0.46				UD	1.1	
S Central	SR 410	103.21	Rock Cr	Naches R	38.0754	culvert	BOX	PCC	3.05	3.05		50		UD	1.1	
S Central	SR 410	116	Unnamed	Naches R	38	culvert	RND	PCC	0.40	0.40	13.72	50	Slope	UD	1.1	
S Central	SR 821	0.1	Unnamed	Yakima R	39.0002A	culvert	RND	SPS	3.05	3.05	49.99	50	Slope	RR	1.1	
S Central	US 12	168.3	Hause Cr	Tieton R	38.0251	culvert	BOX	PCC	1.22	1.22	15.24	0	sheetflow	RR	1.1	
S Central	US 12	168.56	Pine Cr	Tieton R	38.0250	culvert	RND	PCC	0.84	0.84	17.71	33	Slope	RR	1.1	no
S Central	US 12	178.89	Bear Canyon Cr	Tieton R	38.0208	culvert	BOX	PCC	1.21	1.25	16.79	0	Outfall/Slope	RR	1.2	no
S Central	US 12	348.5	Mud Cr	Dry Cr	32.0956	culvert	RND	CST	2.60	2.60	49.94	33	Slope/Outfall	RR	1.1	no
S Central	US 12	387	Pataha Cr	Tucannon R	35.0123	culvert	BOX	PCC				10		UD	1.1	
S Central	US 12	430	Unnamed	Snake R	35	culvert	RND	CST	1.52	1.52				UD	1.2	
S Central	US 97	37.15	Highbridge Springs	Satus Cr	37.1001	culvert	BOX	PCC	2.44	2.44	28.96	0		RR	1.1	
S Central	US 97	37.25	Unnamed	Satus Cr	37	culvert	BOX	PCC	2.36	2.36		50		UD	1.1	yes/fp
S Central	US 97	142.4	Unnamed	Dry Cr	39	culvert	RND	PCC	0.61	0.61	24.99	0	Slope	UD	1.1	yes/om
S Central	US 97	143.2	Dry Cr	Yakima R	39	culvert	BOX	PCC	1.22	1.52	20.73	0	Slope	UD	1.1	
S Central	US 97	144.9	Dry Cr	Yakima R	39	culvert	ARCH	CST	0.91	1.52	27.74	0	Outfall/Slope	UD	1.1	
Southwest	172 NE		Edgecomb Cr	MF Quilceda Cr	07.0060	culvert								UD	1.1	
Southwest	503SP Cougar	34.09	Unnamed	Yale Lk	27	culvert	RND	PCC	1.22	1.22	30.48	0	Outfall/Slope	RR	1.1	
Southwest	503SP Cougar	35.2	Unnamed	Yale Lk	27	culvert	RND	PCC	1.22	1.22	32.00	0	Slope/Outfall	RR	1.1	
Southwest	503SP Cougar	35.58	Unnamed	Yale Lk	27	culvert	RND	PCC	0.76	0.76	40.15	0	Slope/Outfall	RR	1.1	no
Southwest	503SP Cougar	35.69	Unnamed	Dog Cr to Lewis R	27	culvert	RND	PCC	0.76	0.76	50.73	0	Slope/Outfall	RR	1.1	no
Southwest	503SP Cougar	35.84	Dog Cr	Yale Reservoir	27.0476	culvert	BOX	TMB	2.44	2.44	6.71	0	Slope/Outfall	RR	1.1	
Southwest	503SP Cougar	37.06	Panamaker Cr	Yale Reservoir	27.0478	culvert	BOX	CPC	3.05	2.45	20.58	67	Undersized	RR	1.2	no

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Southwest	503SP Cougar	38.77	Dry Cr	Lewis R	27.0481	culvert	BOX	PCC	2.44	3.05	27.74	0	Slope	NG	1.1	
Southwest	I-5	3.31	Cold Cr	Burnt Bridge Cr	28.0144	culvert	RND	PCC	1.07	1.07	45.72	0	Slope/Outfall	RR	1.1	
Southwest	I-5	5.55	Cougar Canyon Cr	Salmon Cr	28.0069	culvert	BOX	PCC	1.22	1.22	63.09	20	Outfall/Slope	RR	1.1	
Southwest	I-5	5.98	Unnamed	Salmon Cr	28	culvert	RND	PCC	1.07	1.07	106.91	67	Velocity	RR	1.1	no
Southwest	I-5	6.1	Unnamed	Salmon Cr	28	culvert	RND	PCC	1.07	1.07	109.55	67	Velocity	RR	1.1	no
Southwest	I-5	6.29	Unnamed	Salmon Cr	28	culvert	RND	PCC	1.07	1.07	31.71	33	Velocity	RR	1.1	no
Southwest	I-5	7.92	Unnamed	Whipple Cr	28	culvert	RND	PCC	0.91	0.91		0		RR	1.1	
Southwest	I-5	8.07	Unnamed	Whipple Cr	28	culvert	RND	PCC	0.76	0.76		0	Outfall	RR	1.1	
Southwest	I-5	8.42	Whipple Cr	lk R	28.0038	culvert	BOX	PCC	1.83	1.83	213.36	67	Slope	RR	1.1	
Southwest	I-5	11.44	Unnamed	Gee Cr	27.0168A	culvert	BOX	CPC	1.22	1.22	36.90	67	Undersized	RR	1.1	no
Southwest	I-5	12.42	Gee Cr	Columbia R	27.0168F	culvert	OTH	OTH	3.05	3.05	128.70			UD	1.1	no
Southwest	I-5	17.3	Unnamed	Columbia R	27	culvert	RND	PCC	1.22	1.22				UD	1.1	
Southwest	I-5	25.85	Mill Cr	Columbia R	27.0144	culvert	RND	CPC	1.82	1.82	68.08	33	Slope/Outfall	RR	1.1	no
Southwest	I-5	26.83	Bybee Cr	Columbia R	27.0142	culvert	BOX	PCC	2.44	1.83	98.15	0	Slope	RR	1.1	
Southwest	I-5	27.8	Schoolhouse Cr	Columbia R	27.0139	culvert	BOX	PCC	1.83	1.83	339.24	0	Slope	RR	1.2	
Southwest	I-5	29.25	Unnamed	Columbia R	27.0137O	culvert	RND	CST	0.91	0.91	55.26	67	Velocity	RR	1.1	no
Southwest	I-5	29.81	Unnamed	Columbia R	27.0136	culvert	OTH	OTH	0.91	0.91	149.38	33	Slope	NG	1.1	no
Southwest	I-5	33.5	Unnamed	Columbia R	27	culvert						0		NG	1.1	
Southwest	I-5	41.62	King Cr	Cowlitz R	26.0127	culvert	RND	SPS	1.60	1.60	186.00	0	Undersized	RR	1.1	no
Southwest	I-5	42.29	Unnamed	Unn. to Cowlitz R	26.0128	culvert	RND	SST	0.90	0.90	147.50	33	Undersized	RR	1.1	yes/fp
Southwest	I-5	44.29	Unnamed	Cowlitz R	26.0180	culvert	RND	CST	0.90	0.90	151.98	0	Blockage	RR	1.1	yes/om
Southwest	I-5	46.77	Unnamed	Cowlitz R	26.0186A	culvert	RND	CST	1.55	1.55		67	Slope	RR	1.1	no
Southwest	I-5	47.485	Unnamed	Salmon Cr	26	culvert	BOX	CPC	1.25	1.55	136.75	33	Sheetflow	RR	1.1	no
Southwest	I-5	47.88	Unnamed	Salmon Cr	26.0188	culvert	RND	CST	2.20	2.20		67	Slope	NG	1.1	yes/om
Southwest	I-5	53.07	Unnamed	Cowlitz R	26	culvert	RND	PCC	1.05	1.05	90.83	33	Outfall/Undersized	RR	1.1	yes/om
Southwest	I-5	53.9	Unnamed	Cowlitz R	26	culvert	RND	CST	0.90	0.90	260.00	0	Undersized	RR	1.1	no
Southwest	I-5	54.4	Unnamed	Cowlitz R	26	culvert	RND	PCC	0.75	0.75	86.61	0	Outfall/Slope	NG	1.1	no
Southwest	I-5	54.93	Unnamed	Hill Cr to Cowlitz R	26	culvert	RND	PCC	0.75	0.75	88.65	0	Length	RR	1.1	no
Southwest	I-5	57.98	Unnamed	Foster Cr to Cowlitz R	26.0476	culvert	BOX	CPC	1.52	1.52	89.31	0	Slope/Outfall	RR	1.1	no
Southwest	I-5	58.63	Foster Cr	Cowlitz R	26.0475	culvert	BOX	CPC	3.05	2.43	52.30	33	Outfall/Velocity	RR	1.1	no
Southwest	I-5	74.05	Berwick Cr	Newaukum R	23.0081	culvert	BOX	CPC	3.05	1.83	61.77	67	Velocity	RR	1.1	no
Southwest	I-5 NB	25.2	Canyon Cr	Columbia R	27.0147	culvert	RND	CST	1.43	1.43		0	Outfall	NG	1.1	no
Southwest	I-5 NB	25.92	Mill Cr	Columbia R	27.0144	culvert	BOX	CPC	1.83	1.85	79.57	33	Slope/Undersized	RR	1.1	yes/fp
Southwest	I-5 off ramp	11	Unnamed	Gee Cr	27.0168A	culvert	RND	PCC	1.22	1.22	35.94	67	Velocity	RR	1.1	no
Southwest	I-5 ROW	6.29	Unnamed	Salmon Cr	28	other						0		RR		
Southwest	I-5 SB	25.31	Canyon Cr	Columbia R	27.0147	culvert	RND	CST	1.43	1.43	38.71	0	Slope/Outfall	NG	1.1	no
Southwest	Nevala Rd		Ross Cr	NF Lewis R	27.0305	fishway		BC				0				
Southwest	SR 103	13.3	Espy Sl	Willapa Bay	24.0743	culvert	RND	CST	1.22	1.22	14.33	0	Tidegate/Outfall	RR	1.1	no



## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Southwest	SR 103	19.84	Stackpole Sl	Willapa Bay	24.0749	culvert	RND	CST	0.91	0.91	18.04	67	Tidegate/Slope	RR	1.1	no
Southwest	SR 105	1.86	Unnamed	Willapa R	24	culvert	RND	PCC	0.90	0.90	26.67	33	Slope/Undersized	RR	1.1	no
Southwest	SR 105	5.95	Unnamed	Fredrickson Sl	24	culvert	RND	PCC	0.75	0.75	18.77	33	Slope	NG	1.1	no
Southwest	SR 105	6.23	Unnamed	Willapa Bay	24.0250	culvert	RND	PCC	1.52	1.52	32.27	33	Slope/Undersized	RR	1.1	no
Southwest	SR 105	7.31	Unnamed	Willapa Bay	24	culvert	RND	CST	0.75	0.75	37.91	33	Slope/Undersized	NG	1.1	no
Southwest	SR 105	13.33	Unnamed	Willapa Bay	24	culvert	RND	CST	0.60	0.60	24.41	0	Slope	NG	1.1	yes/om
Southwest	SR 105	20.12	Unnamed	Willapa Bay	24.0002A	culvert	RND	CST	0.60	0.60		0		NG	1.1	no
Southwest	SR 105	21.22	Pacific Co Ditch 1	Pacific Ocean	24.0001	culvert	RND	CST	1.48	1.48	43.52	67	Tidegate	RR	1.3	no
Southwest	SR 122	4.99	Unnamed	Mayfield Lk	26	culvert	RND	PCC	0.91	0.91	15.93	0	Slope/Undersized	RR	1.1	no
Southwest	SR 122	5.84	Unnamed	Mayfield Lk	26	culvert	BOX	CPC	2.13	2.16	45.90	0	Outfall/Slope	RR	1.1	no
Southwest	SR 123	2.28	Unnamed	Ohanapecosh R	26	culvert	RND	PCC	0.90	0.90	33.19	0	Slope	NG	1.2	yes/om
Southwest	SR 123	3.36	Unnamed	Ohanapecosh R	26	culvert	RND	PCC	0.75	0.75	27.44	33	Slope/Outfall	RR	1.2	no
Southwest	SR 123	5.48	Unnamed	Ohanapecosh R	26	culvert								UD	1.1	
Southwest	SR 123	6.06	Unnamed	Ohanapecosh R	26	culvert	RND	PCC	0.90	0.90		33		NG	1.1	no
Southwest	SR 123	6.35	Unnamed	Ohanapecosh R	26	culvert	RND	PCC	0.90	0.90	15.89	33	Slope	RR	1.2	no
Southwest	SR 14	36.05	Hardy Cr	Hardy Sl (Columbia R)	28.0303A	culvert	BOX	PCC	3.05	3.05	23.16	0	Slope/Outfall	UD	1.1	
Southwest	SR 14	46.6	Unnamed	Columbia R	29	culvert								UD	1.1	
Southwest	SR 14	47.9	Carson Cr	Columbia R	29.0022	culvert	BOX	PCC	2.44	1.83	29.57		Slope	UD	1.1	
Southwest	SR 14	51.6	Unnamed	Columbia R	29	culvert	BOX	PCC	0.91	0.91				UD	1.1	
Southwest	SR 14	117.1	Unnamed	Columbia R	31	culvert	RND	SPS	2.74	2.74	121.92	50	Slope	RR	1.1	
Southwest	SR 14	140.8	Pine Cr	Columbia R	31.0354	culvert	RND	SPS	3.05	3.05	73.00	0	Slope/Outfall	RR	1.4	
Southwest	SR 141	15	Phelps Cr	White Salmon R	29	culvert	BOX	PCC	1.22	0.91		0		UD	1.1	
Southwest	SR 142	1.53	Unnamed	Klickitat R	30	culvert	RND	CST	1.22	1.22	34.41	0	Slope	NG	1.1	no
Southwest	SR 142	8.66	Unnamed	Klickitat R	30	culvert	RND	CST	1.07	1.07	19.00	0	Slope	NG	1.1	no
Southwest	SR 142	13.4	Snyder Canyon Cr	Klickitat R	30.0018	culvert	BOX	PCC	3.04	3.04	19.63	33	Outfall	RR	1.2	no
Southwest	SR 142	16.48	Unnamed	Klickitat R	30	culvert	RND	PCC	1.52	1.52	12.82	0	Slope/Outfall	RR	1.1	no
Southwest	SR 142	25.1	Smith-Mason Cr	Mill Cr	30.0090	culvert	RND	CST	1.52	1.52	22.86	33	Slope	RR	1.2	yes/fp
Southwest	SR 142	25.32	Mill Cr	Little Klickitat R	30.0088	culvert	RND	CST	2.02	2.02	14.60	67	Slope	RR	1.1	no
Southwest	SR 4	0.68	Roaring Cr Sl	Naselle R	24	culvert	RND	CST	0.90	0.90	25.49	0	Tidegate/Outfall	NG	1.1	no
Southwest	SR 4	2.1	Unnamed	Naselle R	24	culvert	RND	PCC	0.60	0.60	39.41	0	Slope	NG	1.1	no
Southwest	SR 4	3.8	Unnamed	Naselle R	24.0575A	culvert	RND	CST	0.75	0.75	23.40	67	Undersized	RR	1.1	no
Southwest	SR 4	6.36	Unnamed	Naselle R	24.0543A	culvert	RND	PCC	0.60	0.60	28.47	0	Slope/Undersized	NG	1.1	no
Southwest	SR 4	6.97	Unnamed	Salmon Cr	24	culvert	RND	SST	0.90	0.90	36.29	0	Slope/Undersized	RR	1.1	no
Southwest	SR 4	7.34	Unnamed	Salmon Cr	24.0624	culvert	RND	PCC	0.76	0.76	23.24	67	Undersized	RR	1.1	no
Southwest	SR 4	7.59	Unnamed	Salmon Cr	24	culvert	RND	PCC	0.75	0.75	28.36	67	Sheetflow	RR	1.2	no
Southwest	SR 4	8.21	Unnamed	Salmon Cr	24	culvert	RND	PCC	0.75	0.75	15.58	33	Outfall/Slope	RR	1.1	no
Southwest	SR 4	8.42	Unnamed	Salmon Cr	24	culvert	RND	PCC	0.75	0.75	48.12	0	Slope/Undersized	NG	1.1	no
Southwest	SR 4	8.73	Unnamed	Salmon Cr	24.0620A	culvert	RND	PCC	0.75	0.75	32.31	0	Slope	RR	1.1	no

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Southwest	SR 4	13.7	Seal Cr	Malone Cr to Grays R	25	culvert	BOX	PCC	1.37	1.37		0	Slope	RR	1.1	
Southwest	SR 4	16.5	Unnamed	Grays R	25	culvert	RND	PCC	0.91	0.91	24.38	0		UD	1.1	
Southwest	SR 4	18.8	Unnamed	Grays R	25.0093A	culvert	RND	PCC	0.91	0.91	24.38	0		UD	1.1	
Southwest	SR 4	30.4	Unnamed	Steamboat Sl	25.0194A	culvert	RND	PCC	1.22	1.22	28.04	0	Velocity	NG	1.1	
Southwest	SR 4	34.1	Unnamed	Columbia R	25	culvert	RND	PCC	1.52	1.52		85		UD	1.1	
Southwest	SR 4	36.9	Unnamed	Columbia R	25	culvert	RND	PCC	1.22	1.22	56.39	0		UD	1.1	
Southwest	SR 401	0.76	Unnamed	Columbia R	24	culvert	RND	PCC	0.91	0.91	16.45	67	Outfall	RR	1.1	no
Southwest	SR 401	0.84	Megler Cr	Columbia R	24.0049	culvert	RND	CST	1.22	1.22	20.26	67	Undersized	RR	1.1	no
Southwest	SR 401	1.85	Unnamed	Columbia R	24.0050	culvert	ELL	CST	1.42	1.60	27.75	67	Undersized	RR	1.1	no
Southwest	SR 401	4.33	Unnamed	Columbia R	24	culvert	RND	PCC	1.22	1.22	32.92	0	Slope	RR	1.1	no
Southwest	SR 401	5.56	Unnamed	SF Naselle R	24.0584A	culvert	RND	PCC	0.61	0.61	28.04	0	Slope/Undersized	RR	1.2	no
Southwest	SR 401	6.02	Unnamed	SF Naselle R	24	culvert	RND	PCC	0.90	0.90	21.55	33	Outfall/Slope	RR	1.1	no
Southwest	SR 401	6.027	Unnamed	SF Naselle R	24.0584B	culvert	RND	PCC	0.90	0.90	28.15	0	Outfall/Slope	RR	1.1	no
Southwest	SR 401	6.13	Unnamed	SF Naselle R	24	culvert	RND	PCC	0.75	0.75	27.30	33	Outfall/Slope	RR	1.1	no
Southwest	SR 401	9.18	Unnamed	SF Naselle R	24	culvert	RND	PCC	0.90	0.90	34.63	0	Slope/Undersized	RR	1.1	no
Southwest	SR 401 Old	5.56	Unnamed	Unn. to Naselle R	24	culvert	RND	PCC	0.61	0.61	12.53	0	Slope/Undersized	RR	1.1	no
Southwest	SR 401 ROW	5.5	SF Naselle R	Naselle R	24.0584	culvert	RND	PCC	1.21	1.21	55.10	0	Slope/Undersized	RR	1.1	no
Southwest	SR 401(old)	5.5	Unnamed	SF Naselle R	24.	culvert	RND	PCC	0.61	0.61	11.00	0	Outfall/Undersized	RR	1.1	no
Southwest	SR 411	7.14	Unnamed	Unn. to Cowlitz R	26	culvert	RND	OTH	0.85	0.85	40.55	0	Slope	RR	1.1	yes/om
Southwest	SR 411	9.56	Unnamed	Cowlitz R	26	culvert	RND	PCC	0.60	0.60	39.66	67	Undersized	RR	1.1	no
Southwest	SR 500	9.78	Unnamed	Lacamas Cr	28.0165	culvert	RND	PCC	0.91	0.91	15.85	33	Slope	RR	1.1	
Southwest	SR 501	17.94	Unnamed	Unn. to Gee Cr	27.0168D	culvert	RND	PCC	0.76	0.76	47.68	0	Slope/Outfall	RR	1.1	yes/om
Southwest	SR 502	0.77	Unnamed	Gee Cr	27.0168A	culvert	RND	PCC	0.91	0.91	18.61	67	Slope	RR	1.1	no
Southwest	SR 503	13.21	Unnamed	Rock Cr	27.0223	culvert	SQSH	CST	2.11	1.55	32.92	33	Outfall/Slope	RR	1.1	no
Southwest	SR 503	15.84	Rock Cr	Lewis R	27.0222	culvert	BOX	PCC	2.15	2.15		33	Velocity	RR	1.2	
Southwest	SR 503	19.55	Unnamed	Bitter Cr	27.0372	culvert	RND	CST	0.61	0.61	18.59	0	Slope/Outfall	RR	1.1	no
Southwest	SR 503	19.85	Bitter Cr	Cedar Cr	27.0367	culvert	SQSH	CST	1.25	0.85	12.14	67	Slope	RR	1.1	no
Southwest	SR 503	25.36	Chelatchie Cr	Cedar Cr	27.0373	culvert	RND	CST	1.22	1.22	14.30	67	Velocity	RR	1.1	no
Southwest	SR 503	27.05	Unnamed	Lewis R	27	culvert	RND	CST	0.64	0.64	24.99	0	Slope	NG	1.1	
Southwest	SR 503	33.04	Brooks Cr	Lewis R	27.0431	culvert	BOX	CPC	1.52	1.86	33.91	33	Slope/Depth	RR	1.1	no
Southwest	SR 503	33.28	Unnamed	Brooks Cr	27.0432	culvert	BOX	CPC	2.45	2.43	34.94	33	Slope/Outfall	RR	1.1	no
Southwest	SR 503	33.5	Unnamed	Unn. to Brooks Cr	27.0433	culvert	RND	PCC	0.91	0.91	31.50	0	Slope/Outfall	RR	1.1	no
Southwest	SR 503	34.97	Unnamed	Lk Merwin	27.0428	culvert	RND	PCC	0.61	0.61	57.17	0	Slope/Undersized	NG	1.1	no
Southwest	SR 503	36.57	Unnamed	Rock Cr	27.0420	culvert	RND	PCC	0.91	0.91	47.52	0	Slope/Outfall	NG	1.1	no
Southwest	SR 503	37.79	Unnamed	Lewis R	27.0417	culvert	RND	PCC	0.91	0.91	36.96	0	Outfal/Slope	NG	1.1	no
Southwest	SR 503	38.17	Unnamed	Lewis R	27.0416	culvert	RND	PCC	0.46	0.46	16.90	0	Slope/Outfall	RR	1.1	no
Southwest	SR 503	38.65	Unnamed	Lewis R	27.0415	culvert	BOX	CPC	0.91	1.57	27.10	0	Slope/Outfall	RR	1.1	no
Southwest	SR 503	38.85	Indian Cr	Lewis R	27.0411	culvert	BOX	CPC	1.85	1.85	31.89	0	Slope/Undersized	NG	1.1	no

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Southwest	SR 503	39.41	Unnamed	Jim Cr	27	culvert	RND	PCC	0.61	0.61	32.59	33	Slope/Undersized	RR	1.1	no
Southwest	SR 503	39.9	Day Cr	Lewis R	27.0409	culvert	RND	PCC	0.75	0.75	23.60	0	Undersized/Slope	RR	1.1	no
Southwest	SR 503	40.94	Cape Horn Cr	Lewis R	27.0401	culvert	BOX	CPC	2.30	2.90	65.86	0	Slope/Outfall	RR	1.1	no
Southwest	SR 503	41.1	Unnamed	Lk Merwin	27.0400	culvert	RND	PCC	0.91	0.91	22.41	0	Slope/Outfall	RR	1.1	no
Southwest	SR 503	42.93	Marble Cr	Lk Merwin	27.0396	culvert	RND	CST	0.91	0.91	24.58	0	Slope/Outfall	NG	1.2	yes/om
Southwest	SR 503	44.34	Husky Cr	Lewis R	27.0359	culvert	RND	PCC	1.22	1.22		0	Outfall/Velocity	NG	1.1	no
Southwest	SR 503	45.3	Unnamed	Lewis R	27	culvert	RND	PCC	0.76	0.76		0	Outfall/Slope	NG	1.1	no
Southwest	SR 503	46.17	Colvin Cr	Lewis R	27.0392	culvert	RND	SPS	1.83	1.83	76.20	0	Slope/Outfall	RR	1.1	yes/fp
Southwest	SR 503	46.55	Davis Cr	Lewis R	27.0338	culvert	RND	PCC	1.37	1.37	51.82	0	Slope	RR	1.1	no
Southwest	SR 503	48.19	Unnamed	Houghton Cr	27	culvert	RND	CST	0.61	0.61	42.01	33	Slope	NG	1.1	yes/om
Southwest	SR 503	49.49	Staples Cr	Lewis R	27.0315	culvert	RND	PCC	1.37	1.37	38.02	0	Outfall/Slope	RR	1.1	no
Southwest	SR 503	50.01	Unnamed	Lewis R	27.0310	culvert	RND	CST	0.61	0.61	46.21	0	Outfall	RR	1.1	no
Southwest	SR 503 ROW	39.41	Unnamed	Jim Cr	27	culvert	RND	PCC	0.61	0.61	19.00	0	Velocity	RR	1.1	yes/om
Southwest	SR 504	2.49	Unnamed	Salmon Cr	26	culvert	RND	CAL	0.80	0.80	42.20	0	Slope	RR	1.1	no
Southwest	SR 504	2.73	Unnamed	Salmon Cr	26	culvert	RND	CAL	0.60	0.60	23.67	0	Slope	RR	1.1	no
Southwest	SR 504	2.76	Unnamed	Salmon Cr	26	culvert	RND	CAL	0.60	0.60	24.60	0	Slope	RR	1.1	no
Southwest	SR 504	3.17	Unnamed	Salmon Cr	26	culvert	RND	CAL	0.80	0.80	33.47	33	Slope/Velocity	RR	1.1	
Southwest	SR 504	4.55	Unnamed	Silver lk	26	culvert	RND	CST	0.75	0.75	27.63	0	Slope/Outfall	NG	1.2	no
Southwest	SR 504	17	Unnamed	NF Toutle R	26.0320	culvert	RND	CST	1.37	1.37	20.42	0	Outfall/Slope	RR	1.1	no
Southwest	SR 504	17.6	Unnamed	NF Toutle R	26	culvert	RND	PCC	1.22	1.22	54.96	0	Slope/Velocity	RR	1.1	no
Southwest	SR 504	22.21	Unnamed	NF Toutle R	26	x	RND	CST	0.75	0.75	98.12	0	Slope/Undersized	NG	1.1	no
Southwest	SR 504	23.58	Unnamed	NF Toutle R	26	culvert	RND	CST	1.60	1.60	68.63	0	Slope/Velocity	RR	1.1	no
Southwest	SR 505	0.16	Unnamed	Olequa Cr	26	culvert	BOX	CPC	0.95	1.54	288.00	0	Outfall/Slope	RR	1.1	no
Southwest	SR 505	0.26	Unnamed	Unn. to Olequa Cr	26	culvert	RND	CST	0.90	0.90	29.49	0	Slope	RR	1.1	no
Southwest	SR 505	19.2	Unnamed	Unn. to NF Toutle R	26	culvert	RND	CST	0.45	0.45	19.86	67	Undersized	RR	1.1	no
Southwest	SR 506	2.77	Unnamed	Stillwater Cr	26.0429A	culvert	RND	PCC	1.07	1.07	31.51	0	Slope/Outfall	RR	1.2	no
Southwest	SR 506	2.98	Unnamed	Stillwater Cr	26	culvert	RND	PCC	0.75	0.75	22.51	0	Slope	RR	1.1	no
Southwest	SR 506	5.41	Unnamed	Stillwater Cr	26	culvert	RND	PCC	1.22	1.22	31.00	67	Slope break	RR	1.1	no
Southwest	SR 506	7.68	Unnamed	Cowlitz R	26	culvert	RND	OTH	0.78	0.78	33.41	0	Slope/Undersized	RR	1.1	yes/om
Southwest	SR 508	4.27	Unnamed	SF Newaukum R	23	culvert	RND	PCC	0.90	0.90	12.42	33	Outfall/Slope	RR	1.1	no
Southwest	SR 508	5.19	Unnamed	SF Newaukum R	23	culvert	RND	PCC	0.91	0.91	15.85	60	Velocity	RR	1.1	
Southwest	SR 508	15.85	Unnamed	Kearney Cr	23.0915A	culvert	RND	PCC	0.91	0.91	15.54	60	Slope	NG	1.1	
Southwest	SR 508	17.55	Stowell Cr	Kearney Cr	23.0916	culvert								UD	1.1	
Southwest	SR 508	18.32	Unnamed	Mill Cr	26	culvert	RND	PCC	0.73	0.73	13.14	33	Slope/Undersized	RR	1.1	no
Southwest	SR 508	18.95	Unnamed	Tilton R	26.0560x	culvert	RND	CPC	0.60	0.60	16.50	67	Undersized	RR	1.1	
Southwest	SR 508	19.75	Unnamed	Cinnabar Cr	26.0562	culvert	RND	PCC	0.60	0.60	14.94	0	Undersized	UD		
Southwest	SR 508	20.37	Shermans Cr	Tilton R	26.0564	culvert	RND	PCC	0.91	0.91	14.63	0	Outfall/Slope	RR	1.1	no
Southwest	SR 508	22.5	Unnamed	Tilton R	26.0566	culvert	RND	CST	1.80	1.80	55.93	0	Slope/Undersized	NG	1.1	no

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Southwest	SR 508	23	Unnamed	Unn.	26.0567x	culvert	RND	PCC	0.90	0.90	10.19	0	Outfall/Undersized	NG	1.1	no
Southwest	SR 508	23.16	Unnamed	Tilton R	26.0560x	culvert	RND	PCC	0.60	0.60	20.36	0	Outfall/Undersized	NG	1.1	yes/om
Southwest	SR 508	23.45	Unnamed	Tilton R	26.0560x	culvert	RND	PCC	0.62	0.62	19.67	0	Outfall	NG	1.1	no
Southwest	SR 508	23.89	Unnamed	Tilton R	26.0560x	culvert	BOX	CPC	1.68	1.82	24.60	33	Slope/Outfall	RR	1.1	no
Southwest	SR 508	23.99	Unnamed	Tilton R	26.0560x	culvert	RND	PCC	0.90	0.90	15.07	0	Undersized/Slope	NG	1.1	no
Southwest	SR 508	30.01	Unnamed	Tilton R	26	culvert	RND	PCC	1.08	1.08	13.64	0	Outfall/Undersized	NG	1.1	no
Southwest	SR 508	31.8	Unnamed	Tilton R	26	culvert	RND	PCC	1.07	1.07	19.51	0	Slope/Outfall	RR	1.1	yes/om
Southwest	SR 531	8.71	Unnamed	Quilceda Cr	07.0060	culvert								UD	1.1	
Southwest	SR 6	0.75	Case Pond	Ellis Sl to Willapa R	24	culvert	RND	CAL	0.75	0.75	19.27	0	Slope/Outfall	RR	1.1	no
Southwest	SR 6	1.85	Unnamed	Willapa R	24	culvert	RND	PCC	0.60	0.60	30.48	0	Slope/Outfall	NG	1.1	
Southwest	SR 6	2.96	Unnamed	Willapa R	24	culvert	RND	PCC	0.75	0.75	17.31	67	Slope/Undersized	RR	1.1	no
Southwest	SR 6	4.82	Unnamed	Willapa R	24	culvert	RND	PCC	1.05	1.05	17.38	33	Slope	NG	1.1	no
Southwest	SR 6	5.37	Unnamed	Willapa R	24	culvert	ELL	PCC	1.02	0.84	47.97	0	Slope/Undersized	RR	1.1	no
Southwest	SR 6	8.32	Unnamed	Willapa R	24	culvert	RND	PCC	0.90	0.90	23.89	67	Slope	RR	1.1	no
Southwest	SR 6	9.83	Unnamed	Unn. to Willapa R	24	culvert	RND	PCC	0.60	0.60	15.68	33	Slope	RR	1.1	no
Southwest	SR 6	9.92	Unnamed	Willapa R	24	culvert	RND	PCC	0.75	0.75	13.52	67	Slope	RR	1.1	no
Southwest	SR 6	11.69	Unnamed	Willapa R	24	culvert	RND	PCC	0.60	0.60	39.08	0	Slope	NG	1.1	no
Southwest	SR 6	17.36	Unnamed	Fern Cr to Willapa R	24	culvert	BOX	CPC	1.08	1.28	16.60	33	Sheetflow	RR	1.1	no
Southwest	SR 6	19.96	Unnamed	Fern Cr to Willapa R	24	culvert	RND	PCC	0.60	0.60	38.20	0	Slope	NG	1.1	no
Southwest	SR 6	20.56	Unnamed	Fern Cr to Willapa R	24	culvert	RND	PCC	0.45	0.45	50.10	0	Slope/Outfall	NG	1.1	no
Southwest	SR 6	21.27	Unnamed	Fern Cr	24	culvert	RND	PCC	0.62	0.62	84.03	0	Slope/Undersized	RR	1.1	no
Southwest	SR 6	24.31	Unnamed	Rock Cr	23	culvert	RND	PCC	0.91	0.91	7.62	0	Slope	NG	1.1	
Southwest	SR 6	25.24	Unnamed	Rock Cr	23	culvert	RND	PCC	0.61	0.61	16.14	50	Slope/Undersized	RR	1.1	yes/om
Southwest	SR 6	34.1	Unnamed	Chehalis R	23	culvert	RND	PCC	0.61	0.61	15.24	85	Slope/Outfall	UD	1.1	
Southwest	SR 6	35	Unnamed	Chehalis R	23	culvert	RND	CAL	0.61	0.61	19.81	0	Outfall	UD	1.1	
Southwest	SR 6	35.1	Unnamed	Chehalis R	23.1098	culvert	RND	CST	0.91	0.91	15.24	0	Slope/Outfall	NG	1.1	
Southwest	SR 7	3.36	Unnamed	Tilton R	26	culvert	RND	PCC	0.90	0.90	17.50	0	Slope/Outfall	RR	1.1	no
Southwest	SR 7	5.5	Unnamed	Tilton R	26	culvert	BOX	CPC	1.52	1.52	32.29	0	Slope/Velocity	RR	1.2	no
Southwest	SR 7	5.64	Unnamed	Tilton R	26	culvert	BOX	CPC	1.24	1.24	19.03	0	Slope	NG	1.1	no
Southwest	SR 7	6.91	Unnamed	Tilton R	26	culvert	BOX	CPC	1.22	1.22	41.70	0	Velocity	RR	1.1	no
Southwest	SR 7	7.36	Unnamed	Tilton R	26	culvert	BOX	CPC	1.83	1.22	27.32	0	Velocity/Sheetflow	NG	1.1	no
Southwest	SR 7	8.89	Tilton R	Mayfield Lk	26	culvert	BOX	CPC	1.54	0.93	18.16	0	Outfall	RR	1.1	no
Southwest	SR 7	9.7	Unnamed	Summit Cr	11	culvert	RND	PCC	0.61	0.61	15.24	0	Outfall/Slope	UD	1.1	
Southwest	SR 7	9.85	Unnamed	Summit Cr	11	culvert	RND	PCC	0.91	0.91	34.75	0	Outfall/Slope	RR	1.1	
Southwest	SR 7	10.25	Unnamed	Summit Cr	11	culvert	BOX	PCC	1.22	1.22	19.81	0	Outfall/Slope	RR	1.1	yes/fp
Southwest	SR 7	10.5	Unnamed	Nisqually R	11	culvert	RND	PCC	0.91	0.91		50		RR	1.1	
Southwest	SR 7	10.51	Unnamed	Round Top Cr	11	culvert	BOX	PCC	0.91	0.91		0		RR	1.1	
Southwest	SR 7	10.8	Unnamed	Round Top Cr	11	culvert	BOX	PCC	1.22	1.22	30.48	0	Slope/Outfall	RR	1.1	

## WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Southwest	SR 7	11.1	Unnamed	Round Top Cr	11	culvert	RND	PCC	0.61	0.61		20		NG	1.1	
Southwest	SR 7	11.2	Unnamed	Round Top Cr	11	culvert	BOX	PCC	0.91	0.91	10.67	0	Slope/Outfall	RR	1.1	
Southwest	SR 7	11.4	Unnamed	Round Top Cr	11	culvert	RND	PCC	0.46	0.46	10.67	50	Slope	NG	1.1	
Southwest	SR 7	11.6	Coal Cr	Nisqually R	11.0168	culvert	BOX	PCC	0.91	1.52	12.19	67	Slope/Outfall	RR	1.1	
Southwest	SR 7	12.8	Unnamed	Mineral Lk	11	culvert	RND	PCC	0.76	0.76	10.67	35	Outfall/Slope	RR	1.1	
Southwest	SR 7	14.7	Unnamed	East Cr	11	culvert	RND	PCC	0.61	0.61		33	Slope	UD	1.1	
Southwest	US 101	1	Unnamed	Columbia R	24.0047	culvert	RND	PCC	0.91	0.91	22.10	0	Outfall/Slope	RR	1.1	no
Southwest	US 101	1.3	Unnamed	Columbia R	24.0045	culvert	RND	PCC	0.61	0.61	27.11	0	Slope/Outfall	RR	1.1	no
Southwest	US 101	1.62	Unnamed	Columbia R	24.0044	culvert	RND	PCC	0.91	0.91		0	Rip rap	RR	1.1	yes/om
Southwest	US 101	2.00	Unnamed	Columbia R	24.0042	culvert	RND	PCC	0.61	0.61	16.64	0	Slope/Outfall	RR	1.1	no
Southwest	US 101	2.29	Unnamed	Columbia R	24.0042	culvert	RND	PCC	0.91	0.91	19.45	0	Rip rap	RR	1.1	yes/om
Southwest	US 101	2.58	Unnamed	Columbia R	24.0041	culvert	RND	PCC	0.61	0.61	16.80	0	Blockage	RR	1.1	no
Southwest	US 101	3.3	Unnamed	Columbia R	24	culvert	RND	PCC	0.61	0.61	20.49	0	Slope/Undersized	RR	1.1	yes/om
Southwest	US 101	7.11	Chinook R	Columbia R	24	culvert	BOX	CPC	2.40	2.55	25.02	33	Tidegate	RR	1.3	no
Southwest	US 101	21.27	Unnamed	Willapa Bay	24.0679	culvert	RND	PCC	0.91	0.91	19.37	67	Slope	RR	1.2	no
Southwest	US 101	21.4	Unnamed	Willapa Bay	24.0680	culvert	RND	PCC	0.91	0.91	22.96	33	undersized	RR	1.1	no
Southwest	US 101	22.12	Unnamed	Willapa Bay	24	culvert	RND	PCC	0.60	0.60	16.93	67	Slope/Undersized	NG	1.1	no
Southwest	US 101	23.31	Unnamed	Willapa Bay	24.0676	culvert	RND	PCC	0.90	0.90	23.59	33	Slope	RR	1.1	no
Southwest	US 101	46.12	Unnamed	Willapa Bay	24	culvert	RND	PCC	0.92	0.92	61.96	0	Slope	RR	1.1	no
Southwest	US 101	46.96	Hansen Cr	Willapa Bay	24.0403	culvert	BOX	PCC	1.83	1.83	31.23	0	Outfall	RR	1.1	yes/om
Southwest	US 101	53.56	Old Mill Pond Cr	Willapa R	24	culvert	RND	PCC	0.75	0.75	46.46	33	Slope	RR	1.1	no
Southwest	US 101	61.15	Butte Cr	Smith Cr	24.0060	culvert	BOX	PCC	2.95	1.83	18.63	33	Slope/Outfall	RR	1.1	no
Southwest	US 101	61.17	Unnamed	Butte Cr	24	culvert	RND	PCC	0.91	0.91	25.11	33	Slope/Undersized	RR	1.1	no
Southwest	US 101	61.26	Unnamed	Butte Cr	24	culvert	RND	PCC	0.61	0.61	22.25	0	Slope/Outfall	RR	1.1	no
Southwest	US 101	64.36	Unnamed	Smith Cr	24	culvert	BOX	CPC	0.95	0.91	18.03	33	Outfall	RR	1.1	no
Southwest	US 101	65.71	Unnamed	Elkhorn Cr	24	culvert	BOX	PCC	0.95	0.91	19.48	67	Outfall	RR	1.1	no
Southwest	US 12	72.45	Unnamed	Lacamas Cr	26.0474	culvert	BOX	PCC	0.92	0.92	22.00	33	Slope	RR	1.1	no
Southwest	US 12	81.22	Silver Cr	Mayfield Lk	26.0540	culvert	SQSH	SPS	2.74	1.85	43.22	0	Slope/Outfall	RR	1.1	no
Southwest	US 12	90.71	Unnamed	Riffe Lk	26	culvert	SQSH	SPS	1.65	1.05		0		NG	1.1	no
Southwest	US 12	91.25	Unnamed	Riffe Lk	26	culvert	SQSH	SPS	1.90	1.45	31.32	0	Slope	RR	1.1	no
Southwest	US 12	91.63	Unnamed	Riffe Lk	26	culvert	RND	CST	0.90	0.90		0		NG	1.1	no
Southwest	US 12	92.09	Unnamed	Riffe Lk	26	culvert	ELL	SPS	1.35	1.70		0		NG	1.1	no
Southwest	US 12	93.14	Unnamed	Unn. to Riffe Lk	26	culvert	ELL	SPS	1.55	1.90		0		NG	1.1	no
Southwest	US 12	93.8	Unnamed	Unn. to Riffe Lk	26	culvert	RND	CST	1.28	1.28	58.96	0	Slope/Outfall	RR	1.1	no
Southwest	US 12	94.15	Highland Cr	Tilton R	26.0590	culvert	ELL	SPS	1.68	N Cen	65.60	0	Outfall/Slope	RR	1.1	yes/om
Southwest	US 12	95.75	Highland Cr	Tilton R	26.0590	culvert	ELL	SPS	2.38	2.58	28.91	67	Outfall/Undersized	RR	1.2	no
Southwest	US 12	95.98	Unnamed	Highland Cr	26	culvert	ELL	CST	1.12	1.32	37.26	67	Slope	RR	1.1	no
Southwest	US 12	101.9	Unnamed	Unn. to Riffe Lk	26	culvert	RND	PCC	0.46	0.46	38.50	0	Slope	NG	1.1	no

WSDOT Fish Passage Features Inventoried as of March 2003

WSDOT District	Highway	Milepost	Stream	Tributary	WRIA	Feature	Shape	Material	Span (m)	Rise (m)	Length (m)	% Fish Pass	Problem	Repair Status	Seq <sup>1</sup>	Maint.
Southwest	US 12	103.43	Unnamed	Riffe Lk	26	culvert	RND	CST	0.90	0.90	93.30	0	Slope	RR	1.1	no
Southwest	US 12	103.98	Steffen Cr	Riffe Lk	26.0652	culvert	SQSH	SPS	3.52	2.39	24.50	67	Slope	RR	1.1	no
Southwest	US 12	106.71	Unnamed	Lunch Cr	26	culvert	BOX	CPC	1.22	0.93	20.71	33	Outfall	RR	1.1	no
Southwest	US 12	109.27	Stiltner Cr	Rainey Cr	26.0654	culvert	BOX	CPC	1.83	0.95	18.67	33	Outfall/Slope	RR	1.1	no
Southwest	US 12	112.08	Unnamed	Kiona Cr	26	culvert	RND	PCC	1.05	1.05	44.10	0	Slope	RR	1.1	no
Southwest	US 12	112.95	Oliver Cr	Kiona Cr	26.1025	culvert	ARCH	CPC	5.89	3.02	31.20	67		RR	1.1	no
Southwest	US 12	113.73	Peters Cr	Kiona Cr	26.1023	culvert	BOX	CPC	3.05	2.44	45.10	0	Outfal/Slope	NG	1.1	no
Southwest	US 12	114.96	Miller Cr	Cowlitz R	26.1028	culvert	ARCH	CPC	5.75	1.35	24.35	33	Sheetflow	RR	1.1	no
Southwest	US 12	124.97	Burton Cr	Cowlitz R	26.1106	culvert	SQSH	SPS	2.95	N Cen	27.58	0	Outfall/Slope	RR	1.1	no
Southwest	US 12	137.73	Unnamed	Cowlitz R	26	culvert	RND	CST	0.90	0.90	38.51	0	Slope/Undersized	NG	1.1	no
Southwest	US 12	149.98	Unnamed	Millridge Cr	26	culvert	BOX	CPC	2.45	1.85	34.75	33	Velocity	RR	1.1	no
Southwest	US 97	12.9	Unnamed	Little Klickitat R	30	culvert	RND	SPS	2.74	2.74	69.00	33	Slope/Outfall	RR	1.1	no
Southwest	US 97	13.39	Unnamed	Little Klickitat R	30	culvert	BOX	PCC	1.83	1.83	34.14	67	Slope	NG	1.1	no
Southwest	US 97	18.4	Jenkins Cr	Little Klickitat R	30.0128	culvert	BOX	CPC	2.45	1.83	35.24	33	Slope/Outfall	RR	1.1	no
Southwest	US 97	21.16	WF L Klickitat R	Little Klickitat R	30.0135	culvert	BOX	CPC	3.05	3.05	54.55	67	Slope	RR	1.1	no
Southwest	US 97	21.35	Butler Cr	EF Little Klickitat	30.0140	culvert	RND	SPS	3.20	3.20	35.61	67	Slope/Undersized	RR	1.1	no
Southwest	US 97	23.99	Dry Cr	Little Klickitat R	30.0147	culvert	BOX	CPC	3.07	1.83	25.60	33	Slope	RR	1.1	no
Southwest	US 97	25.41	EF L Klickitat R	Klickitat R	30.0139	culvert	BOX	CPC	1.85	1.23	28.37	0	Slope/Outfall	RR	1.1	yes/fp
Southwest	US 97	25.59	Idlewild Canyon Cr	EF L Klickitat R	30.0152	culvert	BOX	CPC	1.23	0.94	20.51	33	Slope	RR	1.1	no
Southwest	US 97	27.97	SF Shinando Cr	Shinando Cr	37.1104	culvert	ELL	SPS	1.52	1.83	108.81	0	Outfall/Slope	RR	1.1	no
Southwest	US 97	30.1	Shinando Cr	Satus Cr	37.1103	culvert	BOX	PCC	1.52	1.83	76.20	0	Slope/Outfall	RR	1.1	

The sequencer identifies individual culverts at multiple stream crossings. Format X.Y, where X = specific culvert number, and Y = total number of culvert at a crossing.

For example, in a triple culvert crossing; the first pipe would be 1.3, the second 2.3, and the third 3.3.

**Material**

PCC - precast concrete  
 CST - corrugated steel  
 SST - smooth steel  
 CAL - Corrugated aluminium  
 SPS - structural plate steel  
 PVC - plastic  
 TMB - timber  
 MRY - masonry  
 OTH - other  
 SPA - structural plate aluminium  
 BC – baffled culvert  
 LC – log control  
 WP – weir pool  
 SCC – sacrete control

**Shape**

ARCH - bottomles arch  
 SQSH - squash  
 RND - round  
 BOX - rectangular  
 ELL - ellipse  
 OTH - other



## Appendix II

### WSDOT Fishways Requiring Repair

WSDOT Fishways Requiring Further Work to Satisfy Fish Passage Requirements.

Highway	Milepost	Stream	Tributary to	WRIA	Fishway Type	Recommended Maintenance	Inspection Date	Condition	WSDOT Funding	WSDOT Schedule
Northwest WSDOT Region										
SR 92	1.93	Catherine Creek	Stevens Creek	07.0148	BC	The broken portion of the apron baffle had been replaced. However, the remaining portion and the other baffles are also in deteriorating condition and need to be replaced.	03/28/2002	MNR	D	S
SR 18	25.80	Deep Creek	Raging River	07.0396	BC	Concrete baffles in culvert have broken loose and need to be refastened.	04/22/1997	MNR	D	S
US 2	23.08	Wagley's Creek	Skykomish River	07.0939	WP	The structure needs to be replaced with one of better design, less prone to debris plugging and with outfall drops consistent with criteria.	04/17/1997	MNR		U
I-405	29.75	Swamp Creek	Sammamish River	08.0059	SCC	Sacrete weir, backwatering the downstream end of the culvert has disintegrated and needs to be replaced.	10/15/2002	MNR	D	S
I-405	26.46	Perry Creek	North Creek	08.0070 A	BC	DS entrance to culvert needs to be backwatered to the first baffle, which is about 2m into the pipe.	10/15/2002	MNFP	TP	S
I-90	18.83	EF Issaquah Creek	Issaquah Creek	08.0183	SCC	The middle sackrete control is deteriorating and threatening to blow out. It needs to be repaired or replaced.	05/13/94	MNR		U
I-405	12.70	Kelsey Creek	Mercer Slough	08.0259	WP	The pool depth needs to be increased to stop turbulence.	10/09/2002	MNR		U
Olympic WSDOT Region										
SR 108	8.90	McDonald Creek	Skookum Creek	14.0023	WP	Gravel needs to be removed to facilitate fish passage.	11/04/2002	MNFP	D	C
SR 3	40.50	Chico Creek	Dyes Inlet	15.0229	BC	There is a sheet flow problem in the upper end of this culvert.	10/07/2002	MNR		U

WSDOT Fishways Requiring Further Work to Satisfy Fish Passage Requirements.

Highway	Milepost	Stream	Tributary to	WRIA	Fishway Type	Recommended Maintenance	Inspection Date	Condition	WSDOT Funding	WSDOT Schedule
SR 308	1.15	Big Scandia Creek	Liberty Bay	15.0280	BC	A number of baffles need to be refastened to the bottom of the culvert to provide fish passage.	10/16/2002	MNFP	TP	S
US 101	250.00	Ennis Creek	Strait of Juan de Fuca	18.0234	BC	The fishway is undersized causing high velocities.	10/21/2002	MNR	D	S
US 101	260.95	Matriotti Creek	Dungeness River	18.0021	LC	This fishway is no longer functional; The second log control below the culvert is failing, causing the first control to have an outfall drop of 1.6	05/20/2002	MNR		U
SR 112	32.00	Jim Creek	Strait of Juan de Fuca	19.0110	BC	This culvert is to be replaced by 2002. As a temporary measure, in 2000, DOT re-poured the entire culvert floor and added 13 concrete weirs inside and three rock controls downstream.	10/21/2002	MNR	D	S
SR 109	36.40	Unnamed	Pacific Ocean	21.0715	WP	Rock weirs as drop structures require the use of larger rip-rap, keyed into the banks at the ends. Also, exposed filter fabric can lead to the failure of the weir.	05/02/2001	MNR	D	S
US 101	103.65	Unnamed	Big Cr to Humptulips River	22.0057	LC	The flow was going between the two logs in the log control set, which was never sealed with filter fabric. The culvert was no longer backwatered.	10/30/2002	MNFP	D	S
US 101	111.90	Unnamed	Stevens Creek	22	BC	Two non-permanent baffles in a culvert present; the fishway is not functioning properly and the culvert should be replaced.	08/20/02	MNR		U
Nevala Rd		Ross Creek	NF Lewis River	27.0305	BC	The outfall drop at the culvert outlet, over the attached plate steel weir is currently 2.4 ft. Almost every baffle within the culvert is completely gone.	04/25/2001	MNR		U
North Central WSDOT Region										
SR 20	181.34	Little Boulder Cr	Methow R	48.1400	BC	A log jam on the 7th baffle; pools upstream of log filled with gravel.	07/25/00	MNR	D	S

WSDOT Fishways Requiring Further Work to Satisfy Fish Passage Requirements.

Highway	Milepost	Stream	Tributary to	WRIA	Fishway Type	Recommended Maintenance	Inspection Date	Condition	WSDOT Funding	WSDOT Schedule
Southwest WSDOT Region										
SR 142	20.20	Bowman Creek	L Klickitat River	30.0068	BC	The concrete baffles have eroded exposing re-bar. The last concrete control downstream of the fishway is in the process of re-grading. The drop is in excess of 12".	06/06/2001	MNR	D	S

**Fishway Type:**

BC – baffled culvert

LC – log control

WP – weir pool

SCC – sacrete control

**Condition:**

MNR – requires repair

MNFP – requires maintenance for fish passage

**Project Status:**

S – fish passage project scheduled

U – fish passage project unscheduled

C – fish passage project completed

**Project Funding:**

D – dedicated funding

TP – transportation project

## Appendix III

### W S D O T Project Scoping for Scheduled and Unscheduled Projects

## WSDOT Project Scoping for Scheduled and Unscheduled Projects

Seq <sup>1</sup>	Highway	MP	Stream	Tributary	WRIA	RM	Survey Type	# US Barr	Spawn Area (m <sup>2</sup> )	Rear Area (m <sup>2</sup> )	PI	% Pass	Project Status	Bio Lead	Bio Scope	Eng. Lead	Eng. Scope	Repair Date	Design Option	Cost Estimate
<b>Northwest WSDOT Region</b>																				
1.1	I-405	15.09	Yarrow Cr	Lk Washington	08.0252	1.56	PS4	12	704	10,761	28.47	0	Scope/RP99	Uber	Pending	TA <sup>2</sup>	Pending			
	I-405	26.46	Perry Cr	North Cr	08.0070 A	0.25	ETD	0	444	1,707	11.22	67	Scope/RP		Pending		Pending			
1.1	I-405	26.87	Unnamed	North Cr	08	0.40	ETD	0	138	270	9.33	0	Cosnt/RP		Pending		Pending			
1.1	I-405	29.67	Martha Cr	Swamp Cr	08	0.17	PS4	8	2,138	1,825	11.21	33	Scope	Uber	Pending	Ponder	Pending			
	I-405	29.75	Swamp Cr	Sammamish R	08.0059	6.64	PS4	25	15,853	74,398	61.62	67	Const/W6	Uber	Done	Ponder	Done	2008	Retrofit	\$110,000
1.1	I-405	29.67	Martha Cr	Swamp Cr	08	0.20	PS4	7	2,138	1,825	12.36	67	Scope	Uber	Pending		Pending			
1.2	I-5	174.7	Thornton Cr	Lk Washington	08.0030	4.00	PS4	13	186	1,965	18.09	33	Scope	Uber	Pending	Ponder	Pending			
1.2	I-5	182.7	Swamp Cr	Sammamish R	08.0059	7.66	PS4	25	13,663	55,006	58.42	67	Const/W6	Uber	Done 04/01	Ponder	Done/00	2004	Retrofit	\$130,000
1.1	I-5	213.2	Unnamed	Unn. to Pilchuck Cr	05.0065C	0.00	PS4	6	392	880	12.24	0	Hold	Johnson	Done 06/01	Powers	WSDOT		Replacement	\$360,000
1.1	I-5	213.3	Unnamed	Unn. to Pilchuck Cr	05.0065C	0.04	PS4	5	392	880	12.24	0	Hold	Johnson	Done 06/01	Powers	Done/00		Replacement	\$345,000
1.1	I-5	213.7	Unnamed	Pilchuck Cr	05.0065	4.19	PS4	0	183	148	6.02	33	Hold/T6		Pending	Lautz	Done/01		Retrofit	\$150,000
1.1	I-5	224.6	Maddox Cr	SF Skagit R	03.2966	9.33	PS4	11	2,398	7,699	19.91	33	Scope/PS	Detrick	Pending	Jensen	Done 4/02		Replacement	\$1,000,000
1.1	I-5	250.6	Padden Cr	Bellingham Bay	01.0622	2.25	ETD	0	2,760	52,242	31.29	0	Scope/RP01	Uber	Pending	TA	Pending			
1.1	I-5	256.3	Baker Cr	Squalicum Cr	01.0553	0.56	PS3	31	5,641	29,032	28.66	33	Const/T6	Uber	Done 07/01	Powers	Done/97	2010	Replacement	\$1,200,000
1.1	I-5 NB	256	Baker Cr	Squalicum Cr	01.0553	0.60	PS3	31	4,316	11,892	25.69	67	Const/T6	Uber	Done 11/01	Jensen	Done 04/02	2010	Replacement	\$300,000
	I-5	174.9	Thornton Cr	Lk Washington	08.0030	4.00	PS4	12	186	19,020	23.76	0	Scope	Uber	Pending					
1.1	I-90	13.83	Lewis Cr	Lk Sammamish	08.0162	0.75	PS4	6	3,986	6,663	30.43	0	Const/T6	Uber	Done 02/01	Powers	Done/01	2006	Retrofit	\$3,500,000
1.3	I-90	15.48	Tibbets Cr	Lk Sammamish	08.0169		ETD	3	4,147	9,012	25.93	67	Scope/RP01	Uber	Pending	TA	Pending			
1.1	I-90	23.13	Soderman Cr	Raging R	07.0390	0.12	ETD	0	994	1,892	13.82	33	Scope/RP01		Pending	TA	Pending			
1.1	SR 104	31.3	Lyon Cr	Lk Washington	08.0052	1.20	PS3	34	5,010	8,502	18.11	50	Scope	Johnson	Pending	Jenson	Done/01		Replacement	\$500,000
1.1	SR 11	18.62	Unnamed	Chuckanut Cr	01.0627	0.07	PS4	6	250	4,842	12.53	0	Const/W-no	Detrick	Done 11/01	Jenson	Done/00		Retrofit	\$590,000
1.1	SR 164	9.1	Second Cr	White R	10.0050	1.10	PS1	2	409	1,506	11.10	0	Scope/RP98	Uber	Pending	TA	Done/97		Retrofit	\$589,000
1.1	SR 18	18.19	Taylor Cr	Downs Cr	08.0326	2.98	ETD	2	1,158	5,030	20.54	67	Cosnt/RP	Uber	Pending	TA	Pending			
1.1	SR 18	18.43	Taylor Cr	Downs Cr	08.0326	0.20	PS3	1	422	2,127	25.48	20	Const/RP	Johnson	Pending	TA	Done/97		Retrofit	\$11,000
1.1	SR 18	22.12	Holder Cr	Issaquah Cr	08.0178A	3.25	ETD	0	6,925	10,965	15.93	0	Const/yes	Uber	Pending	Powers	Done 02/02		Retrofit	\$50,000
	SR 18	25.8	Deep Cr	Raging R	07.0396	0.80	PS1		2,928	9,493	15.93	33	Const/T6	Uber	Pending	Powers	Done	2012	Replacement or bridge	\$2,345,000
1.2	SR 18	27.62	Lake Cr	Raging R	07.0393	1.20	PS3	1	1,597	14,558	20.65	33	Const/T6	Johnson	Done 05/01	Powers	Done/97	2010	Replacement	\$223,000
1.2	SR 20	93.84	Unnamed	Skagit R	04.0649	0.21	ETD	1	380	459	5.78	67	Scope/RP01		Pending	TA	Pending			
1.1	SR 20	94.47	Unnamed	Skagit R	04.0654	0.48	ETD	2	806	1,555	8.33	0	Scope/RP01		Pending	TA	Pending			
1.1	SR 20	111	Cub Cr	Bacon Cr	04.1774A	0.20	PS1	0	229	1,093	10.97	33	Hold	Detrick	Pending	Smith	Done/99		Channel Bypass	\$230,000
1.1	SR 203	13.6	Unnamed	Snoqualmie R	07.0219A	0.00	PS3		320	725	11.46	67	Const/RP		Pending	TA	Pending			
1.1	SR 410	35.77	Clay Cr	White R	10.0103		ETD	0	1,377	13,792	7.35	0	Scope/RP01		Pending	TA	Pending			
1.1	SR 509	20.35	Des Moines Cr	Puget Sound	09.0377	0.36	PS4		2,941	10,231	24.61	33	Const/Oth	Johnson	Pending	Powers	Done/97		Replacement	\$2,000,000
1.1	SR 520	4.48	Unnamed	Lk Washington	08.0257	0.08	ETD	1	888	985	14.80	67	Scope/RP01		Pending	TA	Pending			
1.1	SR 520	5.81	Unnamed	Lk Washington	08		ETD	1	704	336	5.69	0	Cosnt/RP		Pending		Pending			

WSDOT Project Scoping for Scheduled and Unscheduled Projects

Seq <sup>1</sup>	Highway	MP	Stream	Tributary	WRIA	RM	Survey Type	# US Barr	Spawn Area (m <sup>2</sup> )	Rear Area (m <sup>2</sup> )	PI	% Pass	Project Status	Bio Lead	Bio Scope	Eng. Lead	Eng. Scope	Repair Date	Design Option	Cost Estimate
1.2	SR 520	6.04	Yarrow Cr	Lk Washington	08.0252	0.52	PS4	31	1,682	13,702	23.18	67	Scope/RP01	Uber	Pending	TA	Pending			
1.2	SR 520	6.19	Yarrow Cr	Lk Washington	08.0252	0.75	PS4	28	1,343	12,850	22.86	67	Scope/RP01	Uber	Pending	TA	Pending			
1.1	SR 520	6.03	Yarrow Cr	Lk Washington	08.0252	0.63	PS4	30	1,682	13,511	23.12	67	Scope/RP01	Uber	Pending	TA	Pending			
1.1	SR 520	6.27	Yarrow Cr	Lk Washington	08.0252	0.83	PS4	21	968	12,144	22.70	67	Scope/RP01	Uber	Pending	TA	Pending			
1.2	SR 520	5.95	Yarrow Cr	Lk Washington	08.0252	0.49	PS4	32	1,682	13,720	23.18	67	Scope/RP01	Uber	Pending	TA	Pending			
1.2	SR 520	5.95	Yarrow Cr	Lk Washington	08.0252	0.43	PS4	33	1,682	13,826	22.08	67	Scope/RP01	Uber	Pending	TA	Pending			
1.1	SR 522	2	Maple Leaf Cr	Thorton Cr	08.0033	0.80	PS1		794	1,136	13.29	0	Scope	Johnson	Pending		Pending			
1.1	SR 522	17.48	Unnamed	Evans Cr	07.0211	3.85	PS4	1	5	260	6.11	33	Scope/RP99	Uber	Pending	TA	Pending			
1.1	SR 522	17.82	Unnamed	Evans Cr	07.0211	3.36	PS4	2	15	11,520	13.23	67	Const/RP	Uber	Done 06/01	TA	Pending			
1.1	SR 522	17.87	Unnamed	Evans Cr	07.0211	3.23	PS4	3	188	11,951	13.36	67	Const/RP	Uber	Done 06/01	TA	Pending			
1.1	SR 522	18.44	Unnamed	Evans Cr	07.0211	2.43	PS4	6	1,546	24,950	21.20	33	Const/RP	Uber	Done 03/01	TA	Done/00			
1.1	SR 522	18.77	Unnamed	Evans Cr	07	1.20	ETD	0	0	583	5.60	33	Scope/RP99	Uber	Pending	TA	Pending			
1.1	SR 522	19.26	Anderson Cr	Evans Cr	07.0212	2.55	ETD	2	536	824	12.06	0	Scope/RP99	Uber	Pending	TA	Pending			
1.1	SR 522	19.35	Unnamed	Anderson Cr	07	0.06	ETD	0	160	318	7.37	0	Hold		Pending		Pending			
1.1	SR 522	20.21	Elliott Cr	Snohomish R	07.0214	0.45	PS1	0	2,058	4,413	15.78	0	Const/RP	Uber	Pending	TA	Done/97		Retrofit	\$700,000
1.1	SR 522	21.95	Unnamed	Skykomish R	07.0814		ETD	0	854	27,418	16.16	67	Scope/RP99	Uber	Pending	TA	Pending			
1.1	SR 522	21.97	Unnamed	Skykomish R	07.0814		ETD	0	854	27,418	16.16	67	Scope/RP99	Uber	Pending	TA	Pending			
1.1	SR 524	6.95	Martha Cr	Swamp Cr	08	0.39	PS4	4	1,971	1,403	13.80	0	Const/T6	Uber	Done 06/01	Jenson	Done/01	2012	Replacement	\$250,000
1.1	SR 530	24.7	Unnamed	Stillaguamish R	05.0137	0.60	PS4	5	1,308	7,332	18.60	0	Const/T6	Detrick	Done4/01/02	Powers	Done/00	2010	Retrofit	\$1,312,000
1.2	SR 530	42.2	Little French Cr	Fortson Cr	05.0253	0.60	PS3	0	1,137	821	8.67	0	Hold	Detrick	Pending		Pending			
1.1	SR 539	4.3	Deer Cr	Tenmile Cr	01.0165	5.20	PS3	15	2,060	20,821	31.44	33	Const/T6	Uber	Done 01/02	Powers	Done/97	2006	Replacement	\$243,000
1.1	SR 542	2.4	Toad Lk Cr	Squalicum Cr	01.0560	0.40	PS1	5	1,832	3,204	13.41	0	Const/T6	Uber	Done 07/01	Jenson	Done/00	2004	Replacement	\$211,000
1.1	SR 542	24.9	High Cr	Kendall Cr	01.0407	2.72	PS3	2	5,286	10,279	21.37	33	Const/T6	Uber	Done 06/01	Powers	Done/97	2004	Retrofit	\$156,000
1.1	SR 542	28.72	Baptist Camp Cr	NF Nooksack R	01.0433		ETD	0	98	240	5.90	33	Scope/PS	Detrick	Done6/01/02	Jensen	Pending	2004		\$94,000
1.2	SR 542	32	Hedrick Cr	Nooksack R	01.0463	0.30	PS1	0	159	576	16.63	0	Const/T6	Uber	Done 06/01	Powers	Done/97	2004	Replacement	\$195,000
1.1	SR 9	48	Gribble Cr	Nookachamps Cr	03.0227	0.26	PS4	8	1,743	18,551	21.92	33	Const/T6	Detrick	Done 02/01	WSDOT/J	WSDOT	2006		\$270,000
1.1	SR 900	20.09	Unnamed	Tibbetts Cr	08.0172	0.10	PS1		156	279	9.25	30	Scope/RP98			TA	Pending			
1.1	SR 900	20.34	Unnamed	Tibbetts Cr	08.0171	0.10	PS1	1	890	1,187	12.47	0	Scope/RP98			TA	Pending			
1.1	SR 92	0.47	Stevens Cr	Lake Stevens	07.0147	4.72	PS4	10	879	3,126	22.00	0	Const/T6	Uber	Done 03/01	Powers	Done/00	2006	Replacement	\$448,000
	SR 92	1.93	Catherine Cr	Stevens Cr	07.0148	1.01	PS4	2	3,207	99,551	24.76	67	Const/W6	Uber	Done 01/01	Powers	Done	2004	Retrofit	\$160,000
1.1	SR 99	51.45	Unnamed	Swamp Cr	08	0.66	PS4	1	3	721	14.79	0	Hold	Uber	Done 11/01	Ponder	Pending			
1.1	SR 99	52.63	Swamp Cr	Sammamish R	08.0059	12.61	PS4	11	414	3,171	17.15	67	Hold	Uber	Done 11/01	Jenson	Done/01		Replacement	\$500,000
<b>North Central WSDOT Region</b>																				
1.2	97AR	222	Oklahoma Gulch	Columbia R	47.0002	0.07	ETD	1	428	518	6.33	0	Scope/RP99		Pending	TA	Pending			
	SR 20	181.3	Little Boulder Cr	Methow R	48.1400	0.10	PS4	0	2,144	5,893	15.67	0	Const/T6	Uber	Done 06/01	Heiner	Done/00	2004	Replacement	\$849,000
1.2	SR 20	205.8	Beaver Cr	Methow R	48.0307	2.14	RSFS	68	49,721	105,061	43.61	67	Done/T	Johnson	Done	Heiner	Done/99	2002	Replacement	\$893,000
1.2	SR 20	206.9	Frazer Cr	Beaver Cr	48.0309	0.35	RSFS	21	7,911	11,267	19.05	67	Done/T	Johnson	Done	Heiner	Done/99	2002	Replacement	\$161,000
1.2	SR 26	1.79	Sand Hollow Cr	Columbia R	41.2151	1.80	PS1	1	1,514	2,614	8.31	0	Scope/RP98		Pending	TA	Done/97		Retrofit	\$960,000



## WSDOT Project Scoping for Scheduled and Unscheduled Projects

Seq <sup>1</sup>	Highway	MP	Stream	Tributary	WRIA	RM	Survey Type	# US Barr	Spawn Area (m <sup>2</sup> )	Rear Area (m <sup>2</sup> )	PI	% Pass	Project Status	Bio Lead	Bio Scope	Eng. Lead	Eng. Scope	Repair Date	Design Option	Cost Estimate
1.1	US 2	70.21	Mill Cr	Nason Cr	45.0956	0.15	RSFS	3	25,289	29,203	19.09	0	Const/T6	Uber	Done 06/01	Heiner	Done/00	2006	Replacement	\$893,000
1.1	US 97	159.7	Swauk Cr	Yakima R	39.1157		PS3	1	5,874	9,814	7.16	33	Scope/RP98		Pending	TA	Pending			
<b>Olympic Region</b>																				
1.1	I-5	105.9	Indian Cr	Moxlie Cr	13.0026	0.43	PS3	13	1,624	18,204	28.26	0	Const/W6	Uber	Done 08/01	Powers	Done 03/02	2006	Replacement	\$1,100,000
1.1	I-5	106.8	Indian Cr	Moxlie Cr	13.0026	1.93	PS4	2	2	15,037	19.33	0	Scope	Uber	Done	Lautz	Pending			
1.1	SR 104	4.25	Unnamed	Barnhouse Cr	17.0213b3	0.50	PS4	2	686	1,467	12.58	33	Scope	Uber	Pending		Pending			
1.1	SR 104	12.57	Unnamed	Squamish Harbor	17	0.29	PS4	1	469	1,082	12.49	0	Scope/RP99		Pending	TA	Pending			
1.1	SR 104	12.7	Unnamed	Squamish Harbor	17.0185	0.32	PS4	2	91	2,276	12.89	0	Const/T6	Johnson	Done 11/01	Powers	Done/01	2012	Replacement	\$972,000
1.1	SR 105	38.1	Unnamed	Johns R	22	0.30	ETD	0	187	448	12.85	0	Scope/PS	Johnson	Pending		Pending			
1.1	SR 106	0.85	Skobob Cr	Skokomish R	16.0004		ETD	0		18,500	19.96	67	Const/T6	Johnson	Pending	WSDOT	Pending	2004	Bridge	\$1,250,000
1.1	SR 106	2.95	Unnamed	Skokomish R	16.0002	0.01	PS2	0	405	678	10.76	0	Const/T6	Johnson	Done	Powers	Done/97	2004	Replacement	\$300,000
1.1	SR 106	6.95	Dalby Cr	Hood Canal	14	0.04	PS3	1	2,497	1,270	20.16	0	Const/T6	Uber	Done 07/01	Ponder	Done/00	2006	Replacement	\$150,000
1.1	SR 109	26.1	Unnamed	Pacific Ocean	21.0764	0.13	PS2		0	1,948	13.84	0	Const/T6	King	Done	Klavas	Done		Replacement	\$90,000
1.1	SR 109	33.1	Unnamed	Pacific Ocean	21.0728	0.10	PS4	2	5,849	4,665	17.18	0	Const/T6	King	Done	Klavas	Done/01		Replacement	\$450,000
1.2	SR 109	33.4	Unnamed	Pacific Ocean	21.0000B	0.07	PS2		599	548	11.36	0	Scope	King	Pending		Pending			
1.1	SR 109	35.6	Unnamed	Pacific Ocean	21.0718	0.03	PS3	3	96	270	9.46	0	Scope	King	Pending		Pending			
1.1	SR 109	36.3	Unnamed	Pacific Ocean	21.0716	0.10	PS1	0	1,239	1,482	14.56	0	Const/T6	King	Done	Klavas	Done/01	2008	Replacement	\$100,000
1.1	SR 109	36.4	Unnamed	Pacific Ocean	21.0715	0.25	PS1		1,289	1,783	15.79	100	Const/T6	King	Pending	Powers	Pending		Fishway	\$50,000
1.2	SR 112	24.91	Unnamed	Pysht R	19.0113K	0.03	PS4	0	4,312	3,574	28.00	0	Const/T6	Uber	Done 06/01	Powers	Done/97	2004	Replacement	\$424,000
1.1	SR 112	29.7	Unnamed	Butler Cr	19	0.01	RSFS	0	864	1,739	14.20	0	Const/T6	Uber	Done06/01	Lautz	Done 03/02	2009	Replacement, log controls	\$400,000
1.1	SR 112	29.71	Butler Cr	Butler Cove	19.0112	0.25	RSFS	1	1,386	2,824	16.02	0	Const/T6	Uber	Done 07/01	Lautz	Done 03/02	2009	Replacement, log controls	\$450,000
	SR 112	32	Jim Cr	Juan de Fuca	19.0110	0.50	PS4	2	10,087	33,799	28.50	67	Const/T6	Uber	Done 04/01	Klavas	Done/00		Replacement	\$871,000
1.1	SR 112	47.1	Nelson Cr	Lyre R	19.0032	1.60	PS3	1	394	488	11.03	0	Scope	Johnson	Pending		Pending			
1.1	SR 112	54.35	Bear Cr	Salt Cr	19.0014	0.40	PS4	5	4,023	6,694	19.01	33	Const/T6	Uber	Done 03/01	Powers	Done/97	2006	Replacement	\$514,000
1.1	SR 16	14.63	Unnamed	McCormick Cr	15	0.01	PS4	2	876	1,958	21.29	0	Const/T6	Uber	Done 06/01	Lautz	Done12/01	2010	Replacement	\$1,400,000
1.1	SR 16	14.86	McCormick Cr	Henderson Bay	15.0065	1.21	PS4	2	1,159	3,305	21.42	33	Const/W6	Uber	Done 06/01	Lautz	Done/01	2008	Replacement	\$1,350,000
1.1	SR 16	15.02	Unnamed	McCormick Cr	15.0066	0.00	PS4	5	765	5,252	24.47	0	Const/yes	Uber	Done 06/01	Lautz	Done11/01	2010	Replacement	\$1,320,000
1.1	SR 16	20.36	Unnamed	Burley Cr	15.0058	0.01	PS2	0	186	308	8.04	30	Scope/RP98		Pending	TA	Pending			
1.1	SR 16	26.8	Ross Cr	Sinclair Inlet	15.0209		PS3		4	1,670	11.04	70	Scope	Uber	Pending		Pending			
1.1	SR 16	27.1	Unnamed	Ross Cr	15.0210	0.26	PS4	4	2,891	12,226	26.45	0	Hold	Uber	Pending	Powers	Done/97		Retrofit	\$865,000
1.1	SR 16	15.21	McCormick Cr	Henderson Bay	15.0065	1.00	PS4	13	2,021	9,074	34.69	33	Const/W6	Uber	Done 06/01	Powers	Done/01	2008	Baffles	\$65,000
1.1	SR 19	4.3	Swansonville Cr	EF Chimacum	17.0205A	0.55	PS4	2	1,239	1,986	14.11	0	Const/T6	Uber	Done 07/01	Lautz	Done/01	2012	Replacement	\$231,000
1.1	SR 3	26.4	Unnamed	Union R	15.0504		ETD	0	936	2,135	17.43	0	Scope/RP99	Uber	Pending	TA	Pending			
1.1	SR 3	29.63	Unnamed	Union R	15.0512	2.27	PS3	4	810	1,162	9.70	0	Const/T6	Johnson	Done 05/01	Powers	Done/01		Fishway; baffles	\$879,000
1.1	SR 3	32.1	Gorst Cr	Sinclair Inlet	15.0216	3.50	PS3	2	1,498	894	10.49	33	Scope/RP99		Pending	TA	Pending			

## WSDOT Project Scoping for Scheduled and Unscheduled Projects

Seq <sup>1</sup>	Highway	MP	Stream	Tributary	WRIA	RM	Survey Type	# US Barr	Spawn Area (m <sup>2</sup> )	Rear Area (m <sup>2</sup> )	PI	% Pass	Project Status	Bio Lead	Bio Scope	Eng. Lead	Eng. Scope	Repair Date	Design Option	Cost Estimate
1.1	SR 3	32.1	Gorst Cr	Puget Sound	15.0216	3.50	PS3	1	1,498	894	10.49	33	Scope/RP99		Pending	TA	Pending			
1.1	SR 3	46.09	Unnamed	Clear Cr	15	0.03	ETD	1	0	2,460	10.35	33	Scope/PS	Johnson	Pending		Pending			
1.1	SR 3	58.48	Spring Cr	Hood Canal	15.0364	0.20	PS4	0	1,094	1,578	13.37	0	Const/W6	Johnson	Done	Powers	Done/97	2006	Retrofit	\$375,000
1.1	SR 302	0.9	Unnamed	Coulter Cr	15.0001	0.20	PS2	0	232	576	11.44	0	Scope	Johnson	Pending		Pending			
1.1	SR 305	0.38	Unnamed	Eagle Harbor	15.0324		ETD	1	550	697	17.91	0	Scope/RP01	Uber	Pending	TA	Pending			
1.1	SR 305	2.44	Unnamed	Murden Cove	15.0321		ETD	0	567	1,962	21.68	33	Scope/RP01	Uber	Pending	TA	Pending			
1.1	SR 305	7.28	Klebeal Cr	Agate Pass	15.0296	0.20	ETD	1	2,615	4,680	29.77	0	Scope/RP01	Uber	Pending	TA	Pending			
1.2	SR 305	9.6	Unnamed	Liberty Bay	15.0291	0.17	PS4	6	2,135	7,364	24.15	0	Const/W6	Uber	Done 06/01	Powers	Done/00	2004	Retrofit	\$120,000
1.1	SR 305	9.88	Bjorgen Cr	Liberty Bay	15.0290	0.38	PS4	3	2,387	1,793	17.21	0	Const/T6	Uber	Done 04/01	Powers	Done/00	2004	Retrofit	\$1,378,000
1.1	SR 307	0.98	Unnamed	Unn. to Dogfish Cr	15		ETD	0	158	73	9.69	0	Scope/RP99		Pending	TA	Pending			
1.1	SR 307	2.5	Unnamed	Gamble Cr	15.0358		ETD	1	38	114	9.23	0	Scope/RP99		Pending	TA	Pending	2002		
1.1	SR 308	1.33	Little Scandia Cr	Liberty Bay	15.0279	0.60	ETD	0	120	133	9.03	0	Scope/RP99		Pending	TA	Pending			
1.1	SR 8	3.51	Unnamed	Wildcat Cr	22	0.02	ETD	1	104	596	15.03	0	Scope/PS	King	Pending 4/03					
1.1	SR 8	3.72	Unnamed pond	Wildcat Cr	22		PS4	0	0	4,339	16.84	0	Scope	King	Pending 4/03					
1.2	SR 8	6.3	EF Wildcat Cr	Cloquallum R	22.0503		ETD	0	6,575	44,879	45.22	33	Scope/PS	King	Pending 4/03					
1.1	SR 8	9.1	Unnamed	Mox Chehalis Cr	22		ETD	2	557	1,367	18.00	33	Scope/PS	Uber	Pending 4/03	Ponder	Pending			
1.2	US 101	68.99	Unnamed	Lower Salmon Cr	24.0106	0.01	PS4	2	857	7,163	17.20	67	Const/T6	Johnson	Done 05/01	Powers	Done 06/01	2008	Replacement	\$300,000
1.2	US 101	71.02	Joe Cr	North R	24.0129	3.21	PS4	0	1,217	16,917	23.10	67	Const/T6	Johnson	Done 06/01	Powers	Done/00	2006	Replacement	\$1,055,000
1.1	US 101	76.48	Mosquito Cr	North R	24.0137	0.02	PS4	1	1,343	5,820	20.36	67	Const/T6	Johnson	Done 06/01	Powers	Done 06/01	2012	Replacement	\$300,000
1.1	US 101	84.15	Unnamed	Grays Harbor	22	0.00	ETD	0	267	743	20.10	0	Scope/PS	King	Pending 4/03					
1.1	US 101	90.73	Unnamed	Hoquaim R	22	0.00	PS4	0	0	4,450	20.63	0	Scope	King	Pending 4/03					
1.1	US 101	93.79	Unnamed	WF Hoquiam R	22	0.02	ETD	0	93	465	16.37	0	Scope/PS	King	Pending 4/03					
1.1	US 101	98.47	Unnamed	WF Hoquiam R	22	0.01	ETD	0	51	981	16.95	67	Scope/PS	King	Pending 4/03					
1.1	US 101	100.7	Unnamed	SF Big Cr trib	22.0060	0.14	PS3	1	0	1,907	11.73	67	Scope	King	Pending 4/03		Pending			
1.1	US 101	100.9	Unnamed	SF Big Cr	22	0.10	PS3	0	14	638	11.80	0	Const/RP	King	Pending 4/03		Pending			
1.1	US 101	102.1	Unnamed	SB Big Cr	22.0059		ETD	0	1,190	10,521	26.32	67	Scope	King	Pending 4/03					
1.2	US 101	103.7	Unnamed	Big Cr	22.0057	0.60	PS3	0	5,436	5,573	17.07	100	Const/W6					2003	tune-up	\$20,000
1.1	US 101	111.3	Unnamed	Stevens Cr	22.0064A	0.26	PS3	0	485	3,052	15.79	33	Const/W6	Johnson	Done 05/01	Powers	Done 97	2009	Retrofit	\$77,000
1.2	US 101	155.2	Unnamed	Pacific Ocean	21	0.07	PS3	0	2,139	1,338	12.78	0	Const/W6	King	Pending	Powers	Done 97	2006	Retrofit	\$150,000
1.2	US 101	155.4	Unnamed	Pacific Ocean	21.0011	0.07	PS2	0	4,282	8,440	19.92	0	Scope/PS	King	Done	Klavas	Pending	2007		\$160,000
1.1	US 101	161.5	Unnamed	Pacific Ocean	20.0000A	0.10	PS2	0	242	572	9.19	0	Scope	King	Pending 4/03		Pending			
1.1	US 101	167.4	Fletcher Cr	Hoh R	20.0426	1.50	PS4	0	1,610	13,076	20.61	67	Const/W6	King	Done 08/01	Powers	Done 00	2003	Retrofit	\$30,000
1.1	US 101	175.5	Unnamed	Old Joe Sl	20		PS3	0	158	578	8.72	67	Scope	King	Pending		Pending			
1.1	US 101	247.8	Peabody Cr	Juan de Fuca	18.0245	0.00	PS3	5	875	2,033	15.39	0	Hold	Uber	Pending		Pending			
1.1	US 101	249.4	White Cr	Ennis Cr	18.0235	0.10	PS4		4,772	5,945	20.08	0	Scope/PS	Uber	Pending	Powers	Pending			
	US 101	250	Ennis Cr	Juan de Fuca	18.0234	1.10	PS4	0	13,853	33,438	31.33	33	Const/W6	Burns	Pending	Lautz	Done	2003	Retrofit	\$50,000
1.1	US 101	250.5	Lees Cr	Juan de Fuca	18.0232	0.80	PS4	11	10,774	14,173	21.14	0	Const/T6	Uber	Done 03/01	Powers	Done 00	2006	Retrofit	\$1,200,000
1.1	US 101	271.2	Unnamed	Sequim Bay	17		PS4	1	0	609	8.27	67	Scope/RP01		Pending	TA	Pending			

## WSDOT Project Scoping for Scheduled and Unscheduled Projects

Seq <sup>1</sup>	Highway	MP	Stream	Tributary	WRIA	RM	Survey Type	# US Barr	Spawn Area (m <sup>2</sup> )	Rear Area (m <sup>2</sup> )	PI	% Pass	Project Status	Bio Lead	Bio Scope	Eng. Lead	Eng. Scope	Repair Date	Design Option	Cost Estimate
1.1	US 101	271.6	Unnamed	Sequim Bay	17.0284	0.04	ETD	2	83	198	7.18	0	Hold		Pending		Pending			
1.1	US 101	271.8	Unnamed	Sequim Bay	17	0.15	ETD	0	120	540	9.91	33	Scope/RP01	Uber	Pending	TA	Pending			
1.1	US 101	272	Chicken Coop Cr	Sequim Bay	17.0278	0.41	RSFS	13	3,383	5,607	30.90	0	Const/T6	Uber	Done 07/01	Powers	Done 97	2004	Replacement	\$850,000
1.1	US 101	277.9	Contractors Cr	Discovery Bay	17.0270	0.50	PS3	0	245	789	12.59	0	Scope	Uber	Pending		Pending			
1.1	US 101	303	Marple Cr	Jackson Cove	17.0001	0.17	ETD	0	2,344	1,919	20.51	33	Scope/PS	Cierebiej	Pending		Pending			
1.1	US 101	360.6	Unnamed	Madrona Beach	14.0002A	0.00	PS2	1	266	350	10.10	0	Scope	Johnson	Pending		Pending			
1.1	US 101	271.2	Unnamed	Sequim Bay	17		PS4	0	0	609	8.27	67	Scope/RP01		Pending	TA	Pending			
1.1	US 12	6.57	Unnamed	Higgins Sl	22	0.02	ETD	0	131	362	7.46	0	Scope/RP98		Pending	TA	Pending			
1.1	US 12	7.26	Unnamed	Higgins Sl	22	0.55	PS3	0	226	378	7.82	0	Scope/RP99		Pending	TA	Pending			
1.1	US 12	9.04	Unnamed	Wynoochee R	22		ETD	1	202	1,940	27.13	33	Scope/PS	King	Pending4/03					
1.1	US 12	26.87	Unnamed	Chehalis R	22.0542	0.00	ETD	0	4,645	3,683	19.68	0	Scope/PS	Uber	Pending4/03	Ponder	Pending 4/03			
1.1	US 12	28.2	Unnamed	Chehalis R	23	0.10	PS2	1	588	963	11.75	0	Scope	Uber	Pending		Pending 4/03			
1.1	US 12	29.19	Unnamed	Chehalis R	23	0.43	ETD	3	2,159	2,979	13.43	0	Scope/PS	Uber	Pending	Ponder	Pending 4/03			
1.1	I-5	5.98	Unnamed	Salmon Cr	28	0.48	ETD	0	660	6,834	16.32	67	Scope/RP01	Johnson	Pending	TA	Pending 4/03			
1.1	I-5	6.1	Unnamed	Salmon Cr	28	0.48	ETD	1	564	7,084	15.67	67	Scope/RP01	Johnson	Pending	TA	Pending 4/03			
1.1	I-5	6.29	Unnamed	Salmon Cr	28	0.09	ETD	4	717	8,055	19.32	33	Scope/RP01	Johnson	Pending	TA	Pending 4/03			
1.1	I-5	25.85	Mill Cr	Columbia R	27.0144	0.00	PS4	2	1,595	5,744	24.91	33	Const/W6	Uber	Pending	Lautz	Pending	20087		\$420,000
1.1	I-5	26.83	Bybee Cr	Columbia R	27.0142	0.26	PS1	1	1,482	1,901	12.36	0	Hold	Johnson	Done	Powers	Done 97		Replacement	\$963,000
1.2	I-5	27.8	Schoolhouse Cr	Columbia R	27.0139	0.18	PS4	5	1,353	4,845	21.33	0	Const/T6	Uber	Done	Ponder	Pending 4/03	2006	Replacement	\$1,750,000
1.1	I-5	29.25	Unnamed	Columbia R	27.01370		ETD	1	1,670	9,684	16.95	67	Scope/PS	Johnson	Pending	Ponder	Pending			
1.1	I-5	41.62	King Cr	Cowlitz R	26.0127		ETD	0	705	1,385	18.55	0	Scope/PS	Uber	Pending		Pending			
1.1	I-5	53.07	Unnamed	Cowlitz R	26	0.88	PS4	2	340	3,587	18.36	33	Const/T6	Johnson	Done 06/01	Powers	Done/01	2008	Replacement	\$397,000
1.1	I-5	53.9	Unnamed	Cowlitz R	26	2.30	PS4	1	121	276	9.65	0	Const/T6	Uber	Done 06/01	Ponder	Pending	2008	Replacement	\$400,000
1.1	I-5	57.98	Unnamed	Foster Cr	26.0476	0.36	PS4	8	160	1,351	11.99	0	Const/T6	Uber	Done 04/01	Powers	Done/01	2010	Replacement	\$2,260,000
1.1	I-5	58.63	Foster Cr	Cowlitz R	26.0475	1.50	PS4	3	2,096	4,772	20.55	33	Const/T6	Uber	Done	Powers	Done/97	2008	Retrofit	\$110,000
1.1	I-5	74.05	Berwick Cr	Newaukum R	23.0081		ETD	0	4,074	18,981	15.53	67	Scope/RP01	Uber	Pending	TA	Pending			
1.1	I-5 NB	25.92	Mill Cr	Columbia R	27.0144	0.11	PS4	1	1,510	2,894	21.92	33	Const/W6	Uber	Done	Lautz	Pending	2007	Retrofit	\$265,000
	Nevala Rd		Ross Cr	NF Lewis R	27.0305	1.00	PS4	0	997	1,798	13.28	0	Scope/PS	Johnson	Pending	Ponder	Pending			
1.1	SR 103	19.84	Stackpole Sl	Willapa Bay	24.0749	0.05	PS4	1	0	28,384	11.34	67	Hold/W	Johnson	Pending	Ponder	Done/00		Replacement	\$145,000
1.1	SR 122	4.99	Unnamed	Mayfield Lk	26	0.04	PS4	1	922	5,576	17.55	0	Const/W6	Johnson	Done 06/01	Wiley	Done/00	2005	Replacement	\$300,000
1.1	SR 122	5.84	Unnamed	Mayfield Lk	26		PS4	0	348	584	10.88	0	Scope	Uber	Pending		Pending			
1.4	SR 14	140.8	Pine Cr	Columbia R	31.0354	0.01	PS3	0	3,706	19,079	14.17	0	Const/T6	Johnson	Done 06/01	Powers	Done/97	2010	Retrofit	\$703,000
1.2	SR 142	13.4	Snyder Can. Cr	Klickitat R	30.0018	0.00	RSFS	2	3,261	15,216	23.19	33	Const/W6	Johnson	Done 07/01	Heiner	Done/00	2002	Retrofit	\$125,000
1.1	SR 142	20.2	Bowman Cr	L Klickitat R	30.0068	0.40	ETD		15,419	33,523	32.35	100/3	BarrierFW	Burns	Pending	Powers	Pending			
1.1	SR 4	6.97	Unnamed	Salmon Cr	24		ETD	0	121	1,161	16.50	0	Scope/PS	Johnson	Pending		Pending			
1.1	SR 4	7.34	Unnamed	Salmon Cr	24.0624	0.08	PS4	1	176	5,593	13.57	67	Scope/PS	Johnson	Pending		Pending			
1.2	SR 4	7.59	Unnamed	Salmon Cr	24		ETD	0	270	721	13.14	67	Scope/PS		Pending		Pending			
1.1	SR 4	8.21	Unnamed	Salmon Cr	24	0.09	PS4	1	528	1,196	13.66	33	Const/T6	Johnson	Done 06/01	Powers	WSDOT	2012	Replacement	\$350,000

## WSDOT Project Scoping for Scheduled and Unscheduled Projects

Seq <sup>1</sup>	Highway	MP	Stream	Tributary	WRIA	RM	Survey Type	# US Barr	Spawn Area (m <sup>2</sup> )	Rear Area (m <sup>2</sup> )	PI	% Pass	Project Status	Bio Lead	Bio Scope	Eng. Lead	Eng. Scope	Repair Date	Design Option	Cost Estimate
1.2	SR 401	5.56	Unnamed	SF Naselle R	24.0584A	0.00	PS4	2	376	1,395	12.29	0	Scope	Johnson	Pending		Pending			
1.1	SR 401	6.02	Unnamed	SF Naselle R	24		ETD	0	50	452	5.30	33	Scope/PS		Pending		Pending			
1.1	SR 401	6.027	Unnamed	SF Naselle R	24.0584B	0.02	PS4	0	66	282	7.66	0	Scope/PS		Pending		Pending			
1.1	SR 401	6.13	Unnamed	SF Naselle R	24		ETD	0	2	99	6.92	33	Scope/PS		Pending		Pending			
1.1	SR 401	8.8	Cement Cr	SF Naselle R	24.0598	0.05	PS3	0	12,470	15,958	36.55	100	Const/W6	Johnson	Done	Powers	Done/97	2002	Retrofit	\$200,000
1.1	SR 401	5.56	Unnamed	Unn. to Naselle R	24	0.01	PS4	0	248	414	12.52	0		Johnson	Pending					
1.1	SR 401	5.5	SF Naselle R	Naselle R	24.0584	7.00	ETD	0	171	2,627	18.74	0	Scope/PS	Johnson	Pending	Lautz	Pending			
1.1	SR 401	5.5	Unnamed	SF Naselle R	24.		PS4	0	115	924	15.62	0	Scope	Johnson	Pending4/03	Lautz	Pending			
1.1	SR 503	13.21	Unnamed	Rock Cr	27.0223	0.08	PS3	6	1,138	3,706	18.88	33	Const/W6	Johnson	Done 05/01	Ponder	Done 10/01	2009	Retrofit	\$110,000
1.2	SR 503	15.84	Rock Cr	Lewis R	27.0222	5.23	PS4	33	776	32,937	27.45	33	Scope	Johnson	Pending	Powers	Pending			
1.1	SR 503	19.85	Bitter Cr	Cedar Cr	27.0367		ETD	3	2,447	4,102	14.88	67	Scope/PS	Johnson	Pending		Pending			
1.1	SR 503	25.36	Chelatchie Cr	Cedar Cr	27.0373		ETD	0	996	7,291	17.39	67	Scope/PS	Johnson	Pending4/03	Lautz	Pending			
1.1	SR 503	33.04	Brooks Cr	Lewis R	27.0431	0.76	PS4	1	3,178	4,603	15.28	33	Scope/PS	Johnson	Pending	Ponder	Pending			
1.1	SR 503	46.17	Colvin Cr	Lewis R	27.0392	0.50	PS4	0	1,021	1,412	15.52	0	Hold	Johnson	Pending	Ponder	Pending			
1.1	SR 503	49.49	Staples Cr	Lewis R	27.0315	0.09	PS4	1	101	214	13.39	0	Hold	Johnson	Pending	Ponder	Pending			
1.1	SR 504	17	Unnamed	NF Toutle R	26.0320	0.08	PS3	3	288	3,303	17.72	0	Const/W6	Johnson	Done 06/01	Powers	Done/00	2006	Replacement	\$200,000
1.1	SR 505	0.26	Unnamed	Unn. to Olequa Cr	26	0.01	ETD	0	235	506	5.96	0	Hold/T	Johnson	Pending		WSDOT		Retrofit	\$89,000
1.1	SR 505	19.2	Unnamed	Unn. Toutle R	26		ETD	0	329	1,130	10.59	67	Hold/6	Johnson	Pending	Powers	Done 01		Replacement	\$121,000
1.2	SR 506	2.77	Unnamed	Stillwater Cr	26.0429A	0.02	PS4	1	55	161	8.16	0	Hold/T6	Johnson	Done 06/01	Powers	Done 01		Replacement	\$300,000
1.1	SR 506	7.68	Unnamed	Cowlitz R	26	0.16	PS4	3	137	434	11.26	0	Const/T6	Uber	Done 06/01	Powers	Done 01	2012	Weir pool fishway	\$400,000
1.1	SR 508	18.32	Unnamed	Mill Cr	26	0.02	ETD	0	807	1,953	13.28	33	Scope/PS	Uber	Pending		Pending			
1.1	SR 508	31.8	Unnamed	Tilton R	26	0.74	PS4	6	433	1,378	10.60	0	Const/yes	Johnson	Done 11/01	Powers	Done 00		Replacement	\$397,000
1.1	SR 6	0.75	Case Pond	Ellis Sl	24	0.00	PS4	1	38	2,899	15.23	0	Const/T6	Johnson	Pending	Powers	Done 00	2008	Replacement	\$420,000
1.1	SR 6	5.37	Unnamed	Willapa R	24	0.14	PS4	2	773	6,814	25.91	0	Const/T6	Johnson	Done 06/01	Ponder	Done 00	2006	Replacement	\$423,000
1.2	SR 7	5.5	Unnamed	Tilton R	26	0.45	PS4	1	548	1,736	15.13	0	Const/W6	Uber	Done 06/01	Powers	Done/02	2005	Retrofit	\$150,000
1.1	SR 7	11.6	Coal Cr	Nisqually R	11.0168	0.10	PS3		484	1,395	8.86	67	Scope/PS	Burns	Pending	Klavas	Done 01/02			
1.1	US 101	1	Unnamed	Columbia R	24.0047	0.00	PS4	0	1,554	2,965	23.63	0	Const/W6	Johnson	Done	Powers	Done 00		Replacement	\$382,000
1.1	US 101	1.3	Unnamed	Columbia R	24.0045	0.00	PS2	0	530	889	18.59	0	Scope	Johnson	Pending	Lautz	Pending			
1.1	US 101	2	Unnamed	Columbia R	24.0042	0.00	PS2	1	24	1,756	15.33	0	Scope	Johnson	Pending	Powers	Done 97		Replacement	\$336,000
1.1	US 101	2.58	Unnamed	Columbia R	24.0041	0.00	PS4	1	0	4,487	17.99	0	Const/T6	Johnson	Pending	Powers	Done 00		Replacement	\$404,000
1.1	US 101	3.3	Unnamed	Columbia R	24	0.00	PS4	0	0	19,968	25.25	0	Const/T6	Johnson	Done01/02	Powers	Done 00		Replacement	\$270,000
1.2	US 101	21.27	Unnamed	Willapa Bay	24.0679	0.24	PS4	3	4,507	4,561	12.13	67	Const/T6	Johnson	Done 06/01	Ponder	Done 01	2012	Replacement	\$198,000
1.1	US 101	21.4	Unnamed	Willapa Bay	24.0680		PS1	0	326	376	10.28	33	Scope	Johnson	Pending		Pending			
1.1	US 101	46.12	Unnamed	Willapa Bay	24	0.03	ETD	0	0	280	7.45	0	Scope/RP99		Pending	TA	Pending			
1.1	US 101	53.56	Old Mill Pond Cr	Willapa R	24	0.00	PS4	2	1	4,862	15.68	33	Const/T6	Johnson	Done 06/01	Ponder	Done 00	2008	Replacement	\$270,000
1.1	US 101	61.15	Butte Cr	Smith Cr	24.0060	4.58	PS4	1	3,236	9,946	20.66	33	Const/W6	Johnson	Done 06/01	Powers	Done 01	2004	Fishway	\$100,000
1.1	US 101	61.26	Unnamed	Butte Cr	24		ETD	1	228	544	10.24	0	Scope/RP99		Pending	TA	Pending			

WSDOT Project Scoping for Scheduled and Unscheduled Projects

Seq <sup>1</sup>	Highway	MP	Stream	Tributary	WRIA	RM	Survey Type	# US Barr	Spawn Area (m <sup>2</sup> )	Rear Area (m <sup>2</sup> )	PI	% Pass	Project Status	Bio Lead	Bio Scope	Eng. Lead	Eng. Scope	Repair Date	Design Option	Cost Estimate
1.1	US 12	72.45	Unnamed	Lacamas Cr	26.0474	0.86	PS4	7	314	1,867	12.03	33	Const/T6	Johnson	Done 06/01	Powers	Done 00	2012	Replacement	\$147,000
1.1	US 12	81.22	Silver Cr	Mayfield Lk	26.0540	0.40	PS4	8	1,708	42,144	33.83	0	Const/T6	Uber	Done 04/01	Powers	Done 00	2004	Replacement	\$541,000
1.2	US 12	95.75	Highland Cr	Tilton R	26.0590	1.04	PS4	8	6,417	12,122	14.77	67	Const/W6	Johnson	Done 06/01	Powers	Done 00	2006	Baffles	\$110,000
1.1	US 12	115	Miller Cr	Cowlitz R	26.1028	0.23	PS4	1	367	789	11.67	33	Const/W6	Uber	Done 04/01	Powers	Done 00	2007	Retrofit	\$55,000
1.1	US 97	27.97	SF Shinando Cr	Shinando Cr	37.1104	1.94	PS4	1	325	664	5.47	0	Scope	Uber	Pending	Heiner	Pending			
1.1	US 97	30.1	Shinando Cr	Satus Cr	37.1103	0.05	PS4	8	12,603	14,910	11.76	0	Const/T6	Uber	Done 10/01	Heiner	Pending	2012	Replacement	\$1,925,000
<b>South Central WSDOT Region</b>																				
1.2	I-90	62.71	Swamp Cr	Yakima R	39.1836	0.15	PS4	1	274	9,624	17.22	33	Const/W6	Uber	Done 06/01	Wiley	Done/00	2005	Retrofit	\$120,000
1.2	I-90	70.9	Silver Cr	Yakima R	39.1713	0.10	PS4	2	6,742	5,279	17.00	0	Const/W6	Uber	Pending	Heiner	Pending			
<b>Eastern WSDOT Region</b>																				
1.1	SR 31	3.8	Ione Millpond	Pend Oreille R	62.0279		PS3	2	15,371	143,218	11.73	0	Scope	Uber	Pending	Heiner	S11/00			
1.1	US 395	247.7	Deadman Cr	Kettle R	60.0008	0.39	ETD	0	49,777	131,546	11.48	0	Const/T6	Uber	Pending	Heiner	Done 99	2004	Replacement	\$1,345,000

<sup>1</sup> The sequencer identifies individual culverts at multiple culvert stream crossings. Format X.Y, where X specifies culvert number and Y specifies total number of culverts in crossing.

For example at a triple culvert crossing, the first pipe would be 1.3, the second 2.3, and the third 3.3.

<sup>2</sup> TA - No specific engineer assigned to scope; scoping is assigned broadly to Technical Assistance team

**Habitat Survey Types:**

ETD - Expanded threshold survey

PS - physical survey

RSFS - reduced sampling full survey

TD - threshold determination

**Project Status:**

ScopePS - Project requires scoping work and physical survey

BarrierFW - Fishway is now a barrier; repair required; may need physical survey

Const/yes - Scoping is complete and the project is recommended for construction

Const/no - Scoping is complete and the project is not recommended for construction

Hold - Scoping is complete and the project is not recommended for construction at this time

Const/Sch - Scoping is complete and the project is scheduled for construction in the WSDOT budget

Cont/T6 - Scheduled for construction by Transportation; on the Six Year Plan

Const/W6 - Scheduled for construction by Fish and Wildlife; on the Six Year Plan

Const/RP - Scheduled for construction by WSDOT through Road Project, year inventoried included (year project to be built will be verified by scoping biologists)

## Appendix IV

# W S D O T Fish Passage Projects – Six Year Plan for Dedicated Funding

WSDOT FISH PASSAGE PROJECT 6 YEAR PLAN														
Project/Site ID	WSDOT Agreement #	WSDOT PIN	Status <sup>1</sup> /PI	WSDOT Region	SR/MP	Agency to Const/YR	Fund	BY \$ 1999-2001 OL/CL	BY \$ 2001-2003	BY \$ 2003-2005	BY \$ 2005-2007	BY \$ 2007-2009	BY \$ 2009-2011	BY \$ 2011-2013
<b>WDFW IMPLEMENTED PROJECTS</b>														
Unnamed Tributary to Fairchild Cr 22.0052 / 991581			Done/1 19.46	Olympic	101/104.90	WDFW/ 1997	OL/CL NL-F	\$10,000						
							NL-R							
							NoR							
Tibbets Cr 08.0169 / 990433			Tuneup/ 23.16	Northwest	900/19.50	WDFW/ 1999	OL/CL NL-F	\$142,000						
						Pending	NL-R							
							NoR							
Big Cedar Cr (Unnamed Tributary to Pacific Ocean) 20.0576 / 991263	GCA 2341	H99014E*	Done/ 19.73	Olympic	101/162.15	WDFW/ 2001	OL/CL NL-F	\$3,000	\$7,000					
							NL-R							
							NoR							
Unnamed Tributary to Pilchuck 5.0065 / 990622	GCA 2260		Done/ 42.03	Northwest	5/211.50	WDFW/ 2000	OL/CL NL-F	\$45,000						
							NL-R							
							NoR							
Valley Cr 18.0249 / 990466	GCA 2259		Done/ 33.07	Olympic	101/246.90	WDFW/ 2000	OL/CL NL-F	\$92,000						
							NL-R							
							NoR							
Birnie Cr SR 409 25.0281 / 990036	GCA 2261	099918A*	Done/ 28.98	Southwest	409/3.85	WDFW/ 2001	OL/CL NL-F	\$100,000	\$167,000					
							NL-R							
							NoR							
Kenyon Cr (Unnamed Trib to NF Lewis) 27.0168B / 991440	GCA 2800	H50314E*	Done/ 24.07	Southwest	503/49.10	WDFW/ 2001	OL/CL NL-F	\$24,000	\$200,000					
							NL-R							
							NoR							
Harlow Cr (repair) / 990178	GCA2299	010414E*	Done/ 25.68	Olympic	101/146.85	WDFW/ 2001	OL/CL NL-F	\$6,000	\$34,000					
							NL-R							
							NoR							
Unnamed Tributary to Bulson Cr 03.0199 / 991741	GCA 2753	H15341E*	Done/ 28.02	Northwest	534/1.20	WDFW/ 2002	OL/CL NL-F	\$5,000	\$790,000	\$40,000				
	GCA 2786						NL-R							
							NL-R							
							NoR							

WSDOT FISH PASSAGE PROJECT 6 YEAR PLAN														
Project/Site ID	WSDOT Agreement #	WSDOT PIN	Status <sup>1</sup> /PI	WSDOT Region	SR/MP	Agency to Const/YR	Fund	BY \$ 1999-2001 OL/CL	BY \$ 2001-2003	BY \$ 2003-2005	BY \$ 2005-2007	BY \$ 2007-2009	BY \$ 2009-2011	BY \$ 2011-2013
Cement Cr 24.0598 / 990071	GCA 3379	099918F*	Done/ 36.55	Southwest	401/8.80	WDFW/ 2002	OL/CL		\$207,000	\$15,000				
							NL-F							
							NL-R							
							NoR							
Hylebos Cr 10.0014 / 991210	GCA 3264	099918G*	Done/ 37.46	Northwest	99/6.86	WDFW/ 2002	OL/CL		\$119,000	\$15,000				
							NL-F							
							NL-R							
							NoR							
Snyder Canyon Cr 30.0018 / 992223	GCA 3296	099918H*	Sched./ 23.19	Southwest	142/13.4	WDFW/ 2003	OL/CL		\$10,000	\$115,000				
							NL-F							
							NL-R							
							NoR							
Fletcher Cr 20.0426 / 161180		099918M	Sched/ 20.61	Olympic	101/167.67	WDFW/ 2003	OL/CL							
							NL-F							
							NL-R		\$5,000	\$25,000				
							NoR							
Ennis Cr 18.0234 / 18.0234 1.10		099918N	Sched/ 31.33	Olympic	101/250.00	WDFW/ 2003	OL/CL							
							NL-F							
							NL-R			\$50,000				
							NoR							
Unnamed Tributary to Big Cr 22.0057 / 991501		099918O	Sched/ 17.07	Olympic	101/103.65	WDFW/ 2003	OL/CL							
							NL-F							
							NL-R			\$20,000				
							NoR							
Swamp Cr 08.0059 / 993090		099918J	Sched/ 58.42	Northwest	5/182.73	WDFW/ 2004	OL/CL							
							NL-F							
							NL-R			\$120,000	\$10,000			
							NoR							
Catherine 07.0148 / 07.0148 1.30		099918K	Sched/ 22.27	Northwest	92/1.93	WDFW/ 2004	OL/CL							
							NL-F							
							NL-R			\$150,000	\$10,000			
							NoR							
Unnamed Tributary to Pilchuck Cr 05.0065 / 990624		099918L	Sched/ 34.55	Northwest	532/9.75	WDFW/ 2004	OL/CL							
							NL-F							
							NL-R			\$90,000	\$10,000			
							NoR							
Butte Cr 24.0060 / 990053		099918Q	Future/ 20.66	Southwest	101/61.15	WDFW/ 2005	OL/CL							
							NL-F							
							NL-R			\$10,000	\$90,000			
							NoR							



WSDOT FISH PASSAGE PROJECT 6 YEAR PLAN														
Project/Site ID	WSDOT Agreement #	WSDOT PIN	Status <sup>1</sup> /PI	WSDOT Region	SR/MP	Agency to Const/YR	Fund	BY \$ 1999-2001 OL/CL	BY \$ 2001-2003	BY \$ 2003-2005	BY \$ 2005-2007	BY \$ 2007-2009	BY \$ 2009-2011	BY \$ 2011-2013
Unnamed Tributary to Tilton R WRIA 26 / 990831		099918R	Future/	Southwest	7/5.50	WDFW/	OL/CL							
			15.13			2005	NL-F							
							NL-R			\$10,000	\$140,000			
							NoR							
Swamp Cr 39.1836 / 992955		099918S	Future/	South	90/62.71	WDFW/	OL/CL							
			17.22	Central		2005	NL-F							
							NL-R			\$10,000	\$110,000			
							NoR							
Unnamed Tributary to Pacific Ocean 21 / 990723		099918U	Future/	Olympic	101/155.15	WDFW/	OL/CL							
			12.78			2006	NL-F							
							NL-R				\$140,000	\$10,000		
							NoR							
Spring Cr 15.0364 / 990395		099918W	Design/	Olympic	3/58.48	WDFW/	OL/CL							
			13.37			2006	NL-F							
							NL-R				\$335,000	\$40,000		
							NoR							
Highland Cr 26.0590 / 990190		099918X	Future/	Southwest	12/95.75	WDFW/	OL/CL							
			14.77			2006	NL-F							
							NL-R				\$100,000	\$10,000		
							NoR							
Miller Cr 26.1028 / 992227		099918Z	Future/	Southwest	12/114.96	WDFW/	OL/CL							
			11.67			2007	NL-F							
							NL-R				\$5,000	\$50,000		
							NoR							
Unnamed Tributary to Pacific Ocean 21.0011 / 991267			Future/	Olympic	101/155.35	WDFW/	OL/CL							
			19.92			2007	NL-F							
							NL-R				\$20,000	\$140,000		
							NoR							
Swamp Cr 08.0059 / 08.0059 7.00			Future/	Northwest	405/29.75	WDFW/	OL/CL							
			61.62			2007	NL-F							
							NL-R							
							NoR				\$10,000	\$100,000		
Mill Cr 27.0144 / 994588			Future/	Southwest	5(SB)/25.85	WDFW/	OL/CL							
			24.91			2008	NL-F							
							NL-R							
							NoR					\$380,000	\$40,000	
Mill Cr 27.0144 994553			Future/	Southwest	5(NB)/25.92	WDFW/	OL/CL							
			21.92			2008	NL-F							
							NL-R							
							NoR					\$240,000	\$25,000	

[illegible]

WSDOT FISH PASSAGE PROJECT 6 YEAR PLAN														
Project/Site ID	WSDOT Agreement #	WSDOT PIN	Status <sup>1</sup> /PI	WSDOT Region	SR/MP	Agency to Const/YR	Fund	BY \$ 1999-2001 OL/CL	BY \$ 2001-2003	BY \$ 2003-2005	BY \$ 2005-2007	BY \$ 2007-2009	BY \$ 2009-2011	BY \$ 2011-2013
<b>WSDOT IMPLEMENTED PROJECTS</b>														
Coal Cr 08.0268 / 08.0268 0.80		140539C	Done/	Northwest	405/10.12	WSDOT	OL/CL		\$128,000					
			33.99				NL-F							
							NL-R							
							NoR							
Moose Cr 05.0257 / 990291 Fink Cr 05.0257A / 990317 Combined		153036F	Done/	Northwest	530/44.00	WSDOT	OL/CL		\$312,000					
			23.98		530/44.27		NL-F							
							NL-R							
							NoR							
Toad Lake Cr 01.0560 / 991803		154202T	Future/	Northwest	542/2.40	WSDOT	OL/CL		\$47,000					
			13.41				NL-F							
							NL-R		\$3,000	\$161,000				
							NoR							
High Cr 01.0407 / 991621		154225F	Future/	Northwest	542/24.90	WSDOT	OL/CL		\$51,000					
			21.37				NL-F							
							NL-R		\$2,000	\$103,000				
							NoR							
Baptist Camp Cr 01.0433 / 990023 (WSDOT Programed Project)		154229E	Scope/	Northwest	542/28.72	WSDOT	OL/CL		\$62,000					
			5.90				NL-F							
			(ETD PI)				NL-R		\$2,000	\$92,000				
							NoR							
Hedrick Cr 01.0463 / 990187		154231H	Future/	Northwest	542/32.00	WSDOT	OL/CL		\$64,000					
			16.63				NL-F							
							NL-R		\$2,000	\$129,000				
							NoR							
Gribble Cr 03.0227A / 991122		100937G	Future/	Northwest	9/48.00	WSDOT	OL/CL			\$50,000				
			21.92				NL-F							
							NL-R			\$89,000	\$110,000			
							NoR							
Deer Cr 01.0165 / 990112			Future/	Northwest	539/4.30	WSDOT	OL/CL							
			21.67				NL-F							
							NL-R							
							NoR				\$243,000			
Stevens Cr 07.0147 / 991821		109200F	Future/	Northwest	92/0.47	WSDOT	OL/CL			\$124,000				
			22.00				NL-F							
							NL-R							
							NoR				\$324,000			
Lewis Cr 08.0162 / 992798			Future/	Northwest	90/13.83	WSDOT	OL/CL							
			30.43				NL-F							
							NL-R							
							NoR				\$3,500,000			

WSDOT FISH PASSAGE PROJECT 6 YEAR PLAN														
Project/Site ID	WSDOT Agreement #	WSDOT PIN	Status <sup>1</sup> /PI	WSDOT Region	SR/MP	Agency to Const/YR	Fund	BY \$ 1999-2001 OL/CL	BY \$ 2001-2003	BY \$ 2003-2005	BY \$ 2005-2007	BY \$ 2007-2009	BY \$ 2009-2011	BY \$ 2011-2013
Baker Cr 01.0554 / 990022 combined with Baker Cr/ 992003			Future/	Northwest	5/256.28	WSDOT	OL/CL							
			28.66		I-5 NB on		NL-F							
			25.69		ramp /		NL-R							
					256.00		NoR						\$1,200,000	
Unnamed Tributary to Stillaguamish R 05.0137 / 991159			Future/	Northwest	530/24.70	WSDOT	OL/CL							
			18.6				NL-F							
							NL-R							
							NoR						\$1,312,000	
Lake Cr 7.0393 / 990236			Future/	Northwest	18/27.60	WSDOT	OL/CL							
			20.65				NL-F							
							NL-R							
							NoR						\$223,000	
Deep Cr 07.0396 / 07.0396 0.80			Future/	Northwest	18/25.80	WSDOT	OL/CL							
			15.93				NL-F							
							NL-R							
							NoR							\$2,400,000
Martha Cr 08.0061 / 993100			Future/	Northwest	524/6.95	WSDOT	OL/CL							
			13.8				NL-F							
							NL-R							
							NoR							\$250,000
<b>Northwest Totals</b>							OL/CL		\$664,000	\$174,000	\$0	\$0	\$0	\$0
							NL-F		\$0	\$0	\$0	\$0	\$0	\$0
							NL-R		\$9,000	\$574,000	\$110,000	\$0	\$0	\$0
							NoR		\$0	\$0	\$567,000	\$3,500,000	\$2,735,000	\$2,650,000
Skinney Cr 45.0700A (3 road crossings) / 990381 / 990382 / 990383		200200H	Done/	North	2/87.1-88.1	WSDOT	OL/CL	\$100,000	\$1,341,000					
			13.50/12.15/	Central			NL-F							
			14.01				NL-R							
							NoR							
Beaver Cr 48.0307 / 980108		215310A	Done/	North	153/29.28	WSDOT	OL/CL	\$543,000	\$1,000					
			37.85	Central			NL-F							
							NL-R							
							NoR							
Beaver Cr 48.0307 (RM2.14) COMBINED / 980014		202001R	Future/	North	20/205.80	WSDOT	OL/CL	\$68,000	\$90,000					
			43.61	Central			NL-F							
							NL-R		\$50,000	\$682,000				
							NoR							
Frazer Cr 48.0309 (RM 0.35) (Beaver Cr Trib) COMBINED / 980124		202001R	Future/	North	20/206.85	WSDOT	OL/CL	\$22,311						
			19.05	Central		with	NL-F							
						Beaver Cr	NL-R							
						SR20	NoR							

WSDOT FISH PASSAGE PROJECT 6 YEAR PLAN														
Project/Site ID	WSDOT Agreement #	WSDOT PIN	Status <sup>1</sup> /PI	WSDOT Region	SR/MP	Agency to Const/YR	Fund	BY \$ 1999-2001 OL/CL	BY \$ 2001-2003	BY \$ 2003-2005	BY \$ 2005-2007	BY \$ 2007-2009	BY \$ 2009-2011	BY \$ 2011-2013
Little Boulder Cr (Mazama) 48.1400 / 990228		202001P	Future/	North	20/181.34	WSDOT	OL/CL		\$100,000					
			15.67	Central			NL-F							
							NL-R		\$49,400	\$699,600				
							NoR							
Mill Cr 45.0956 / 990282		200202D	Future/	North	2/70.21	WSDOT	OL/CL			\$125,000				
			19.09	Central			NL-F							
							NL-R							
							NoR				\$688,000			
<b>North Central Totals</b>							OL/CL	\$733,311	\$1,532,000	\$125,000	\$0	\$0	\$0	\$0
							NL-F	\$0	\$0	\$0	\$0	\$0	\$0	\$0
							NL-R	\$99,400	\$1,381,600	\$0	\$0	\$0	\$0	\$0
							NoR	\$0	\$0	\$688,000	\$0	\$0	\$0	\$0
Sweetwater Cr 15.0504 / 991797		300342C	Done/	Olympic	3/25.34	WSDOT	OL/CL	\$71,000	\$187,000	\$3,000				
			10.53				NL-F							
							NL-R							
							NoR							
Unnamed Tributary to Pacific Ocean 21.0715 / 991270			Tuneup/	Olympic	109/36.40	WSDOT	OL/CL	\$225,000						
			14.56				NL-F							
							NL-R							
							NoR							
Skobob Cr 16.0004 / 990384		310603A	Future/	Olympic	106/0.85	WSDOT	OL/CL							
			19.96				NL-F							
							NL-R		\$81,000	\$1,169,000				
							NoR							
Bear Cr 19.0014 / 990713	GCA 2464	099918I	Design/	Olympic	112/54.35	WSDOT	OL/CL	\$2,000	\$62,000	\$450,000				
			19.01				NL-F							
							NL-R							
							NoR							
Unnamed Tributary to Skokomish R 16.0002 / 991244		H10914C	Future/	Olympic	106/2.95	WSDOT	OL/CL	\$53,000						
			10.76				NL-F							
							NL-R		\$24,000	\$276,000				
							NoR							
Jim Cr 19.0110 / 19.0110 0.50		311220D	Sched./	Olympic	112/32.00	WSDOT	OL/CL	\$146,000	\$81,000	\$499,000				
			28.50				NL-F							
							NL-R							
							NoR							
Unnamed Tributary to Pysht R 19.0113K / 990714		311228A	Future/	Olympic	112/24.91	WSDOT	OL/CL		\$30,000	\$86,000				
			28.00				NL-F							
							NL-R			\$308,000				
							NoR							

WSDOT FISH PASSAGE PROJECT 6 YEAR PLAN														
Project/Site ID	WSDOT Agreement #	WSDOT PIN	Status <sup>1</sup> /PI	WSDOT Region	SR/MP	Agency to Const/YR	Fund	BY \$ 1999-2001 OL/CL	BY \$ 2001-2003	BY \$ 2003-2005	BY \$ 2005-2007	BY \$ 2007-2009	BY \$ 2009-2011	BY \$ 2011-2013
Bjorgen Cr 15.0290 / 991742		330514A	Future/	Olympic	305/9.88	WSDOT	OL/CL							
			17.21				NL-F							
							NL-R		\$71,000	\$205,000				
							NoR			\$1,102,000				
Chicken Coop Cr 17.0278 / 990075		310161D	Future/	Olympic	101/271.98	WSDOT	OL/CL							
			30.9				NL-F							
							NL-R		\$32,000	\$818,000				
							NoR							
Unnamed Tributary to Liberty Bay 15.0291 / 990709		099918P	Future/	Olympic	305/9.60	WSDOT/	OL/CL							
			24.15			2004	NL-F							
							NL-R			\$875,000				
							NoR							
Joe Cr 24.0129 / 992510			Future/	Olympic	101/71.02	WSDOT	OL/CL							
			23.1				NL-F							
							NL-R							
							NoR				\$1,055,000			
Dalby Cr 14 / 990910			Future/	Olympic	106/6.95	WSDOT	OL/CL							
			20.16				NL-F							
							NL-R							
							NoR				\$150,000			
Lees Cr 18.0232 / 990240			Future/	Olympic	101/250.50	WSDOT	OL/CL							
			21.14				NL-F							
							NL-R							
							NoR				\$1,200,000			
Unnamed Tributary to Lower Salmon Cr 24.0106 / 992493			Future/	Olympic	101/68.99	WSDOT	OL/CL							
			17.2				NL-F							
							NL-R							
							NoR				\$300,000			
Butler Cr 19.0112 (2 road crossings) / 991258/990941			Future/	Olympic	112/29.71	WSDOT	OL/CL							
			16.02		112/29.70		NL-F							
							NL-R							
							NoR				\$850,000			
Unnamed Tributary to Pacific Ocean 21.0716 / 991271			Future/	Olympic	109/36.30	WSDOT	OL/CL							
			14.56				NL-F							
							NL-R							
							NoR				\$100,000			
Indian Cr 13.0026 / 990199		099918Y	Future/	Olympic	5/105.85	WSDOT	OL/CL							
			28.26				NL-F							
							NL-R							
							NoR				\$1,100,000			

WSDOT FISH PASSAGE PROJECT 6 YEAR PLAN														
Project/Site ID	WSDOT Agreement #	WSDOT PIN	Status <sup>1</sup> /PI	WSDOT Region	SR/MP	Agency to Const/YR	Fund	BY \$ 1999-2001 OL/CL	BY \$ 2001-2003	BY \$ 2003-2005	BY \$ 2005-2007	BY \$ 2007-2009	BY \$ 2009-2011	BY \$ 2011-2013
Unnamed Tributary to McCormick Cr 15 / 991939			Future/ 21.29	Olympic	16/14.63	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR						\$1,400,000	
McCormick Cr 15.0065 / 991941			Future/ 21.42	Olympic	16/14.86	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR						\$1,350,000	
Unnamed Tributary to McCormick Cr 15.0066 / 991942			Future/ 24.47	Olympic	16/15.02	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR						\$1,320,000	
Unnamed Tributary to Pacific Ocean 21.0728 / 991272			Future/ 17.18	Olympic	109/33.10	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR							\$450,000
Mosquito Cr 24.0137 / 991908			Future/ 13.73	Olympic	101/76.48	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR							\$300,000
Unnamed Tributary to Squamish Harbor 17.0185 / 992196			Future/ 12.89	Olympic	104/12.70	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR							\$972,000
Swansonville Cr Tributary to EF Chimacum Cr 17.0205A /990711			Future/ 14.11	Olympic	19/4.30	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR							\$231,000
Unnamed Tributary to Union R 15.0512 / 991728			Future/ 9.7	Olympic	3/29.63	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR							\$879,000
<b>Olympic Totals</b>							OL/CL	\$426,000	\$360,000	\$1,038,000	\$0	\$0	\$0	\$0
							NL-F		\$0	\$0	\$0	\$0	\$0	\$0
							NL-R		\$208,000	\$3,651,000	\$0	\$0	\$0	\$0
							NoR		\$0	\$1,102,000	\$2,405,000	\$2,350,000	\$4,070,000	\$2,832,000
Unnamed trib Stillwater Cr 26.0429B / 991684			Done/ 16.62	Southwest	506/2.30	WSDOT	OL/CL	\$199,000						
							NL-F							
							NL-R							
							NoR							

WSDOT FISH PASSAGE PROJECT 6 YEAR PLAN														
Project/Site ID	WSDOT Agreement #	WSDOT PIN	Status <sup>1</sup> /PI	WSDOT Region	SR/MP	Agency to Const/YR	Fund	BY \$ 1999-2001 OL/CL	BY \$ 2001-2003	BY \$ 2003-2005	BY \$ 2005-2007	BY \$ 2007-2009	BY \$ 2009-2011	BY \$ 2011-2013
Johnson Cr 24.0581 / 990220		400400D	Done/ 28.74	Southwest	4/4.50	WSDOT	OL/CL		\$269,000					
							NL-F							
							NL-R							
							NoR							
Silver Cr 26.0540 / 990377		401202F	Future/ 33.83	Southwest	12/81.22	WSDOT	OL/CL		\$111,000	\$430,000				
							NL-F							
							NL-R							
							NoR							
Bowman Cr 30.0068 / 30.0068 0.40		412206F	Future/ 32.35	Southwest	142/20.2	WSDOT	OL/CL			\$80,000				
							NL-F							
							NL-R							
							NoR			\$270,000				
Unnamed Tributary to NF Toutle R 26.0320 / 991334		099918V	Future/ 17.72	Southwest	504/17.00	WSDOT	OL/CL							
							NL-F							
							NL-R			\$200,000				
							NoR							
Unnamed Tributary to Mayfield Lake 26 / 992234		099918T	Future/ 17.55	Southwest	122/4.99	WSDOT	OL/CL							
							NL-F							
							NL-R			\$300,000				
							NoR							
Unnamed Tributary to Columbia R 24.0047 / 991388			Future/ 23.63	Southwest	101/1.00	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR			\$380,000				
Unnamed Tributary to Columbia R 24 / 992821			Future/ 25.25	Southwest	101/3.3	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR			\$270,000				
Unnamed Tributary to Willapa R 24 / 990805			Future/ 25.91	Southwest	6/5.37	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR			\$423,000				
Schoolhouse Cr and Unnamed Tributary 27.0139 / 991655			Future/ 21.33	Southwest	5/27.80	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR			\$1,750,000				
Old Mill Pond Cr 24 / 992311			Future/ 15.68	Southwest	101/53.56	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR				\$270,000			



WSDOT FISH PASSAGE PROJECT 6 YEAR PLAN														
Project/Site ID	WSDOT Agreement #	WSDOT PIN	Status <sup>1</sup> /PI	WSDOT Region	SR/MP	Agency to Const/YR	Fund	BY \$ 1999-2001 OL/CL	BY \$ 2001-2003	BY \$ 2003-2005	BY \$ 2005-2007	BY \$ 2007-2009	BY \$ 2009-2011	BY \$ 2011-2013
Unnamed Tributary to Cowlitz R 26 (2 crossings) 992602 / 992608			Future/	Southwest	5/53.07	WSDOT	OL/CL							
			9.7/ 18.36		5/53.09		NL-F							
							NL-R							
							NoR					\$800,000		
Unnamed Tributary to Columbia R 24.0041 / 991390			Future/	Southwest	101/2.58	WSDOT	OL/CL							
			17.99				NL-F							
							NL-R							
							NoR					\$404,000		
Case Pond 24 / 990774			Future/	Southwest	6/0.75	WSDOT	OL/CL							
			15.23				NL-F							
							NL-R							
							NoR					\$420,000		
Pine Cr 31.0354 / 990341			Future/	Southwest	14/140.80	WSDOT	OL/CL							
			14.17				NL-F							
							NL-R							
							NoR					\$703,000		
Unnamed Tributary to Foster Cr 26.0476 / 991734			Future/	Southwest	5/57.98	WSDOT	OL/CL							
			11.99				NL-F							
							NL-R							
							NoR						\$2,260,000	
Unnamed Tributary to Willapa Bay 24.0679 / 991308			Future/	Southwest	101/21.27	WSDOT	OL/CL							
			12.13				NL-F							
							NL-R							
							NoR							\$198,000
Unnamed Tributary to Lacamas Creek 26.0474 / 991426			Future/	Southwest	12/72.45	WSDOT	OL/CL							
			12.03				NL-F							
							NL-R							
							NoR							\$147,000
Unnamed Tributary to Salmon Cr 24 / 992405			Future/	Southwest	4/8.21	WSDOT	OL/CL							
			13.66				NL-F							
							NL-R							
							NoR							\$350,000
Shinando Cr 37.1103 / 990857			Future/	Southwest	97/30.10	WSDOT	OL/CL							
			11.76				NL-F							
							NL-R							
							NoR							\$1,925,000
Unnamed Tributary to Stillwater Cr 26.0429A / 991685			Future/	Southwest	506/2.77	WSDOT	OL/CL							
			8.16			Hold	NL-F							
							NL-R							
							NoR							\$300,000

WSDOT FISH PASSAGE PROJECT 6 YEAR PLAN														
Project/Site ID	WSDOT Agreement #	WSDOT PIN	Status <sup>1</sup> /PI	WSDOT Region	SR/MP	Agency to Const/YR	Fund	BY \$ 1999-2001 OL/CL	BY \$ 2001-2003	BY \$ 2003-2005	BY \$ 2005-2007	BY \$ 2007-2009	BY \$ 2009-2011	BY \$ 2011-2013
Unnamed Tributary to Cowlitz R 26 /991432			Future/ 11.26	Southwest	506/7.68	WSDOT	OL/CL							
							NL-F							
							NL-R							
							NoR							\$400,000
<b>Southwest Totals</b>							OL/CL	\$199,000	\$380,000	\$510,000	\$0	\$0	\$0	\$0
							NL-F		\$0	\$0	\$0	\$0	\$0	\$0
							NL-R		\$0	\$200,000	\$300,000	\$0	\$0	\$0
							NoR		\$0	\$270,000	\$2,823,000	\$2,597,000	\$2,260,000	\$3,320,000
O' Brien Cr 52.0394 (3 crossings) / 990299 / 990300 / 990312		602030J	Done/ 10.91	Eastern	20/309.31 20	WSDOT	OL/CL		\$906,000					
							NL-F							
							NL-R							
							NoR							
Deadman Cr 60.0008 / 990106		639514E	Future/ 11.48	Eastern	395/247.70	WSDOT	OL/CL		\$200,000	\$1,045,000				
							NL-F							
							NL-R							
							NoR							
<b>Eastern Totals</b>							OL/CL	\$0	\$1,106,000	\$1,045,000	\$0	\$0	\$0	\$0
							NL-F		\$0	\$0	\$0	\$0	\$0	\$0
							NL-R		\$0	\$0	\$0	\$0	\$0	\$0
							NoR		\$0	\$0	\$0	\$0	\$0	\$0
						sub-total	OL/CL	\$1,358,311	\$4,042,000	\$2,892,000	\$0	\$0	\$0	\$0
						WSDOT	NL-F		\$0	\$0	\$0	\$0	\$0	\$0
							NL-R		\$316,400	\$5,806,600	\$410,000	\$0	\$0	\$0
							NoR		\$0	\$1,372,000	\$6,483,000	\$8,447,000	\$9,065,000	\$8,802,000
						Total	WSDOT		\$1,358,311	\$4,358,400	\$10,070,600	\$6,893,000	\$8,447,000	\$9,065,000
						Grand Total	OL/CL	\$2,645,311	\$6,648,000	\$4,413,000	\$0	\$0	\$0	\$0
						(WDFW + WSDOT)	NL-F		\$0	\$0	\$0	\$0	\$0	\$0
							NL-R		\$321,400	\$6,291,600	\$1,380,000	\$250,000	\$0	\$0
							NoR		\$0	\$1,372,000	\$7,893,000	\$10,747,000	\$10,815,000	\$10,272,000
						Project Totals			\$6,969,400	\$12,076,600	\$9,273,000	\$10,997,000	\$10,815,000	\$10,272,000
<sup>1</sup> The following status codes are used: Done - Project completed Tuneup - Project completed but needs additional work Design - Project funded for design only Scheduled - Project is funded for design/construction Future - Project is fully scoped and ready for design/construction Scope - Project not recommended for construction; needs additional scoping.							OL/CL - old law current law; funded							
							NL-F - new law; funded							
							NL-R - new law - requested; not funded							
							NoR - no request; not funded							

## Appendix V

Dedicated Project Evaluations – Adult Spawner  
Surveys – Levels I and II

### Dedicated Projects Evaluations – Adult Spawner Surveys

Site ID	Survey Date	Stream	WRIA	Species	Total Length (mi)	Live Count	Dead Count	Total Fish Count	Redd Count	Project Location	Survey Timing	Evaluation Level	Evaluation Status	Project Functional	Area Surveyed
07.0148 1.30	12/17/2002	Catherine Cr	07.0148	Coho	1.2	71	3	74	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Downstream
07.0148 1.30	11/20/2000	Catherine Cr	07.0148	Coho	1	3	10	13	9	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Downstream
07.0148 1.30	10/31/2002	Catherine Cr	07.0148	Coho	1.2	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Downstream
07.0148 1.30	10/31/2002	Catherine Cr	07.0148	Coho	0.4	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Upstream
07.0148 1.30	11/07/2002	Catherine Cr	07.0148	Coho	1.2	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Downstream
07.0148 1.30	11/07/2002	Catherine Cr	07.0148	Coho	0.4	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Upstream
07.0148 1.30	11/18/2002	Catherine Cr	07.0148	Coho	1.2	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Downstream
07.0148 1.30	11/18/2002	Catherine Cr	07.0148	Coho	0.4	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Upstream
07.0148 1.30	11/25/2002	Catherine Cr	07.0148	Coho	1.2	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Downstream
07.0148 1.30	11/25/2002	Catherine Cr	07.0148	Coho	0.4	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Upstream
07.0148 1.30	12/02/2002	Catherine Cr	07.0148	Coho	1.2	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Downstream
07.0148 1.30	12/02/2002	Catherine Cr	07.0148	Coho	0.4	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Upstream
07.0148 1.30	12/10/2002	Catherine Cr	07.0148	Coho	1.2	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Downstream
07.0148 1.30	12/10/2002	Catherine Cr	07.0148	Coho	0.4	0	0	0	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Upstream
07.0148 1.30	12/17/2002	Catherine Cr	07.0148	Coho	0.4	17	0	17	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Upstream
07.0148 1.30	12/24/2002	Catherine Cr	07.0148	Coho	1.2	171	7	178	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Downstream
07.0148 1.30	12/24/2002	Catherine Cr	07.0148	Coho	0.4	21	4	25	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Upstream

### Dedicated Projects Evaluations – Adult Spawner Surveys

Site ID	Survey Date	Stream	WRIA	Species	Total Length (mi)	Live Count	Dead Count	Total Fish Count	Redd Count	Project Location	Survey Timing	Evaluation Level	Evaluation Status	Project Functional	Area Surveyed
07.0148 1.30	12/30/2002	Catherine Cr	07.0148	Coho	1.2	72	101	173	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Downstream
07.0148 1.30	12/30/2002	Catherine Cr	07.0148	Coho	0.4	17	13	30	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Upstream
07.0148 1.30	01/04/2003	Catherine Cr	07.0148	Coho	1.2	5	58	63	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Downstream
07.0148 1.30	01/04/2003	Catherine Cr	07.0148	Coho	0.1	0	4	4	0	SR 92 Mp 1.93	Pre-project	1	Incomplete	No	Upstream
990071	11/15/2002	Cement Cr	24.0598	Chum	0.05	43	11	54	0	SR 401 Mp 8.8	Post-project	1	Complete	Yes	Downstream
990071	11/15/2002	Cement Cr	24.0598	Coho	0.05	0	1	1		SR 401 Mp 8.8	Post-project	1	Complete	Yes	Downstream
990071	11/15/2002	Cement Cr	24.0598	Chum	0.30	569	110	679		SR 401 Mp 8.8	Post-project	1	Complete	Yes	Upstream
990071	11/15/2002	Cement Cr	24.0598	Coho	0.30	5	0	5		SR 401 Mp 8.8	Post-project	1	Complete	Yes	Upstream
990071	11/26/2002	Cement Cr	24.0598	Chum	0.05	4	29	33		SR 401 Mp 8.8	Post-project	1	Complete	Yes	Downstream
990071	11/26/2002	Cement Cr	24.0598	Coho	0.05	0	0	0		SR 401 Mp 8.8	Post-project	1	Complete	Yes	Downstream
990071	11/26/2002	Cement Cr	24.0598	Chum	0.30	29	256	285		SR 401 Mp 8.8	Post-project	1	Complete	Yes	Upstream
990071	11/26/2002	Cement Cr	24.0598	Coho	0.30	0	0	0		SR 401 Mp 8.8	Post-project	1	Complete	Yes	Upstream
990071	12/11/2002	Cement Cr	24.0598	Chum	0.30	0	3	3	0	SR 401 Mp 8.8	Post-project	1	Complete	Yes	Downstream
990071	12/11/2002	Cement Cr	24.0598	Coho	0.30	0	0	0	0	SR 401 Mp 8.8	Post-project	1	Complete	Yes	Downstream
990071	12/11/2002	Cement Cr	24.0598	Chum	0.30	0	127	127	0	SR 401 Mp 8.8	Post-project	1	Complete	Yes	Upstream
990071	12/11/2002	Cement Cr	24.0598	Coho	0.30	8	0	8	2	SR 401 Mp 8.8	Post-project	1	Complete	Yes	Upstream
08.0268 0.80	11/13/2002	Coal Cr	08.0268	Coho	0.80	0	0	0	1	I-405 Mp 10.12	Post-project	1	Incomplete	Yes	Upstream

### Dedicated Projects Evaluations – Adult Spawner Surveys

Site ID	Survey Date	Stream	WRIA	Species	Total Length (mi)	Live Count	Dead Count	Total Fish Count	Redd Count	Project Location	Survey Timing	Evaluation Level	Evaluation Status	Project Functional	Area Surveyed
08.0268 0.80	11/26/2002	Coal Cr	08.0268	Coho	0.30	0	0	0	0	I-405 Mp 10.12	Post-project	1	Incomplete	Yes	Downstream
08.0268 0.80	11/26/2002	Coal Cr	08.0268	Coho	0.30	0	0	0	0	I-405 Mp 10.12	Post-project	1	Incomplete	Yes	Upstream
08.0268 0.80	12/23/2002	Coal Cr	08.0268	Coho	0.30	0	0	0	0	I-405 Mp 10.12	Post-project	1	Incomplete	Yes	Downstream
08.0268 0.80	12/23/2002	Coal Cr	08.0268	Coho	0.30	0	0	0	0	I-405 Mp 10.12	Post-project	1	Incomplete	Yes	Upstream
18.0234 1.10	11/25/2002	Ennis Cr	18.0234	Coho	0.30	0	0	0	0	US 101 Mp 250	Pre-project	1	Incomplete	No	Downstream
18.0234 1.10	11/25/2002	Ennis Cr	18.0234	Coho	0.30	0	0	0	2	US 101 Mp 250.00	Pre-project	1	Incomplete	No	Upstream
18.0234 1.10	12/11/2002	Ennis Cr	18.0234	Coho	0.30	0	0	0	0	US 101 Mp 250	Pre-project	1	Incomplete	No	Downstream
18.0234 1.10	12/11/2002	Ennis Cr	18.0234	Coho	0.30	0	0	0	1	US 101 Mp 250.00	Pre-project	1	Incomplete	No	Upstream
990317	11/26/2002	Fink Cr	05.0257A	Coho	0.30	0	0	0	0	SR 530 Mp 44.20	Post-project	1	Incomplete	Yes	Downstream
990317	12/05/2002	Fink Cr	05.0257A	Coho	0.30	0	9	9		SR 530 Mp 44.27	Post-project	1	Incomplete	Yes	Downstream
990317	12/05/2002	Fink Cr	05.0257A	Coho	0.20	0	0	0		SR 530 Mp 44.27	Post-project	1	Incomplete	Yes	Upstream
990317	12/16/2002	Fink Cr	05.0257A	Coho	0.30	3	0	3	1	SR 530 Mp 44.27	Post-project	1	Incomplete	Yes	Downstream
990220	11/15/2002	Johnson Cr	24.0581	Chum	0.30	0	1	1		SR 4 Mp 4.5	Post-project	1	Complete	Yes	Downstream
990220	11/15/2002	Johnson Cr	24.0581	Coho	0.30	2	2	4		SR 4 Mp 4.5	Post-project	1	Complete	Yes	Downstream
990220	11/15/2002	Johnson Cr	24.0581	Chum	0.30	0	0	0		SR 4 Mp 4.5	Post-project	1	Complete	Yes	Upstream
990220	11/15/2002	Johnson Cr	24.0581	Coho	0.30	6	0	6		SR 4 Mp 4.5	Post-project	1	Complete	Yes	Upstream
990220	11/26/2002	Johnson Cr	24.0581	Chum	0.30	3	1	4		SR 4 Mp 4.5	Post-project	1	Complete	Yes	Downstream

### Dedicated Projects Evaluations – Adult Spawner Surveys

Site ID	Survey Date	Stream	WRIA	Species	Total Length (mi)	Live Count	Dead Count	Total Fish Count	Redd Count	Project Location	Survey Timing	Evaluation Level	Evaluation Status	Project Functional	Area Surveyed
990220	11/26/2002	Johnson Cr	24.0581	Coho	0.30	0	0	0	0	SR 4 Mp 4.5	Post-project	1	Complete	Yes	Downstream
990220	11/26/2002	Johnson Cr	24.0581	Chum	0.30	0	0	0		SR 4 Mp 4.5	Post-project	1	Complete	Yes	Upstream
990220	11/26/2002	Johnson Cr	24.0581	Coho	0.30	2	2	4	1	SR 4 Mp 4.5	Post-project	1	Complete	Yes	Upstream
990220	12/20/2002	Johnson Cr	24.0581	Coho	0.30	0	2	2	0	SR 4 Mp 4.5	Post-project	1	Complete	Yes	Downstream
990220	12/20/2002	Johnson Cr	24.0571	Coho	0.30	0	1	1	0	SR 4 Mp 4.5	Post-project	1	Complete	Yes	Upstream
990291	11/26/2002	Moose Cr	05.0257	Coho	0.30	0	8	8	0	SR 530 Mp 44.00	Post-project	1	Incomplete	Yes	Downstream
990291	11/26/2002	Moose Cr	05.0257	Coho	0.30	8	0	8	5	SR 530 Mp 44.00	Post-project	1	Incomplete	Yes	Upstream
990921	12/05/2002	Moose Cr	05.0257	Coho	0.30	0	2	2		SR 530 Mp 44.00	Post-project	1	Incomplete	Yes	Downstream
990921	12/05/2002	Moose Cr	05.0257	Coho	0.30	0	5	5		SR 530 Mp 44.00	Post-project	1	Incomplete	Yes	Upstream
990291	12/16/2002	Moose Cr	05.0257	Coho	0.30	0	0	0	0	SR 530 Mp 44.00	Post-project	1	Incomplete	Yes	Downstream
990291	12/16/2002	Moose Cr	05.0257	Coho	0.30	10	0	10	2	SR 530 Mp 44.00	Post-project	1	Incomplete	Yes	Upstream
990400	11/15/2002	Steamboat Cr	20.0574	Coho	0.05	0	0	0	0	US 101 Mp 162.60	Post-project	2	Incomplete	Yes	Downstream
990400	11/15/2002	Steamboat Cr	20.0574	Coho	0.63	1	0	1	1	US 101 Mp 162.60	Post-project	2	Incomplete	Yes	Upstream
990400	11/26/2002	Steamboat Cr	20.0574	Coho	0.05	0	0	0	0	US 101 Mp 162.60	Post-project	2	Incomplete	Yes	Downstream
990400	11/26/2002	Steamboat Cr	20.0574	Coho	0.63	1	0	1	2	US 101 Mp 162.60	Post-project	2	Incomplete	Yes	Upstream
990400	12/17/2002	Steamboat Cr	20.0574	Coho	0.05	0	0	0	0	US 101 Mp 162.60	Post-project	2	Incomplete	Yes	Downstream

### Dedicated Projects Evaluations – Adult Spawner Surveys

Site ID	Survey Date	Stream	WRIA	Species	Total Length (mi)	Live Count	Dead Count	Total Fish Count	Redd Count	Project Location	Survey Timing	Evaluation Level	Evaluation Status	Project Functional	Area Surveyed
990400	12/17/2002	Steamboat Cr	20.0574	Coho	0.63	0	0	0	1	US 101 Mp 162.60	Post-project	2	Incomplete	Yes	Upstream
990433	11/26/2002	Tibbetts Cr	08.0169	Coho	0.01	0	0	0	0	SR 900 Mp 19.50	Post-project	1	Incomplete	Yes	Between
990433	11/26/2002	Tibbetts Cr	08.0169	Coho	0.20	0	0	0	0	SR 900 Mp 19.50	Post-project	1	Incomplete	Yes	Downstream
990433	12/23/2002	Tibbetts Cr	08.0169	Coho	0.20	0	0	0	0	SR 900 Mp 19.50	Post-project	1	Incomplete	Yes	Downstream
990433	12/23/2002	Tibbetts Cr	08.0169	Coho	0.30	0	0	0	0	SR 900 Mp 19.50	Post-project	1	Incomplete	Yes	Upstream
991741	11/26/2002	Unnamed to Bulson Cr	03.0199	Coho	0.30	0	0	0	0	SR 534 Mp 1.20	Post-project	1	Complete	Yes	Downstream
991741	12/18/2002	Unnamed to Bulson Cr	03.0199	Coho	0.30	2	0	2	3	SR 534 Mp 1.20	Post-project	1	Complete	Yes	Downstream
991741	12/18/2002	Unnamed to Bulson Cr	03.0199	Coho	0.30	13	0	13	9	SR 534 Mp 1.20	Post-project	1	Complete	Yes	Upstream
991741	12/31/2002	Unnamed to Bulson Cr	03.0199	Coho	0.30	2	0	2	0	SR 534 Mp 1.20	Post-project	1	Complete	Yes	Downstream
991741	12/31/2002	Unnamed to Bulson Cr	03.0199	Coho	0.30	0	5	5	0	SR 534 Mp 1.20	Post-project	1	Complete	Yes	Upstream
991270	01/15/2002	Unnamed to Pacific	21.0715	Coho	0.25	0	0	0	0	SR 109 Mp 36.40	Pre-project	1	Incomplete	No	Downstream
991270	01/15/2002	Unnamed to Pacific	21.0715	Coho	0.30	0	0	0	1	SR 109 Mp 36.40	Pre-project	1	Incomplete	No	Upstream
991270	11/08/2002	Unnamed to Pacific	21.0715	Coho	0.25	0	0	0	0	SR 109 Mp 36.40	Pre-project	1	Incomplete	No	Downstream
991270	11/08/2002	Unnamed to Pacific	21.0715	Chum	0.30	0	0	0	0	SR 109 Mp 36.40	Pre-project	1	Incomplete	No	Upstream
991270	11/26/2002	Unnamed to Pacific	21.0715	Chum	0.25	0	0	0	0	SR 109 Mp 36.40	Pre-project	1	Incomplete	No	Upstream
991270	11/26/2002	Unnamed to Pacific	21.0715	Chum	0.30	0	0	0	0	SR 109 Mp 36.40	Pre-project	1	Incomplete	No	Upstream



### Dedicated Projects Evaluations – Adult Spawner Surveys

Site ID	Survey Date	Stream	WRIA	Species	Total Length (mi)	Live Count	Dead Count	Total Fish Count	Redd Count	Project Location	Survey Timing	Evaluation Level	Evaluation Status	Project Functional	Area Surveyed
991270	12/17/2002	Unnamed to Pacific	21.0715	Coho	0.25	0	0	0	0	SR 109 Mp 36.40	Pre-project	1	Incomplete	No	Downstream
991270	12/17/2002	Unnamed to Pacific	21.0715	Chum	0.30	0	0	0	0	SR 109 Mp 36.40	Pre-project	1	Incomplete	No	Upstream
991684	11/21/2002	Unnamed to Stillwater Cr	26.0429B	Coho	0.10	0	0	0	0	SR 506 Mp 2.33	Post-project	2	Incomplete	Yes	Downstream
991684	12/20/2002	Unnamed to Stillwater Cr	26.0429B	Coho	0.13	1	1	2	2	SR 506 MP 2.30	Post-project	2	Incomplete	Yes	Downstream
991684	12/20/2002	Unnamed to Stillwater Cr	26.0429	Coho	0.30	0	0	0	0	SR 506 MP 2.30	Post-project	2	Incomplete	Yes	Upstream
990466	11/12/2002	Valley Cr	18.0249	Chum	0.30	0	0	0	0	US 101 MP 246.90	Post-project	2	Incomplete	Yes	Downstream
990466	11/12/2002	Valley Cr	18.0249	Coho	0.30	0	0	0	0	US 101 MP 246.90	Post-project	2	Incomplete	Yes	Downstream
990466	11/12/2002	Valley Cr	18.0249	Chum	0.30	0	0	0	0	US 101 MP 246.90	Post-project	2	Incomplete	Yes	Upstream
990466	11/12/2002	Valley Cr	18.0249	Coho	0.30	0	0	0	0	US 101 MP 246.90	Post-project	2	Incomplete	Yes	Upstream
990466	11/25/2002	Valley Cr	18.0249	Chum	0.28	0	0	0	0	US 101 MP 246.90	Post-project	2	Incomplete	Yes	Downstream
990466	11/25/2002	Valley Cr	18.0249	Coho	0.30	0	0	0	0	US 101 MP 246.90	Post-project	2	Incomplete	Yes	Downstream
990466	11/25/2002	Valley Cr	18.0249	Chum	0.30	0	0	0	0	US 101 MP 246.90	Post-project	2	Incomplete	Yes	Upstream
990466	11/25/2002	Valley Cr	18.0249	Coho	0.30	0	0	0	0	US 101 MP 246.90	Post-project	2	Incomplete	Yes	Upstream
990466	12/11/2002	Valley Cr	18.0249	Coho	0.30	0	0	0	0	US 101 MP 246.90	Post-project	2	Incomplete	Yes	Downstream
990466	12/11/2002	Valley Cr	18.0249	Coho	0.30	0	0	0	0	US 101 MP 246.90	Post-project	2	Incomplete	Yes	Upstream
991210	11/13/2002	WF Hylebos Cr	10.0014	Coho	0.21	0	0	0	0	SR 99 Mp 6.86	Post-project	1	Complete	Yes	Downstream

### Dedicated Projects Evaluations – Adult Spawner Surveys

Site ID	Survey Date	Stream	WRIA	Species	Total Length (mi)	Live Count	Dead Count	Total Fish Count	Redd Count	Project Location	Survey Timing	Evaluation Level	Evaluation Status	Project Functional	Area Surveyed
991210	11/13/2002	WF Hylebos Cr	10.0014	Coho	0.29	5	0	5	4	SR 99 Mp 6.86	Post-project	1	Complete	Yes	Upstream
991210	11/26/2002	WF Hylebos Cr	10.0014	Coho	0.20	0	0	0	0	SR 99 MP 6.86	Post-project	1	Complete	Yes	Downstream
991210	11/26/2002	WF Hylebos Cr	10.0014	Coho	0.30	0	2	2	5	SR 99 MP 6.86	Post-project	1	Complete	Yes	Upstream
991210	12/19/2002	WF Hylebos Cr	10.0014	Chum	0.20	2	0	2	1	SR 99 Mp 6.86	Post-project	1	Complete	Yes	Downstream
991210	12/19/2002	WF Hylebos Cr	10.0014	Coho	0.21	0	0	0	0	SR 99 Mp 6.86	Post-project	1	Complete	Yes	Downstream
991210	12/19/2002	WF Hylebos Cr	10.0014	Coho	0.29	0	0	0	0	SR 99 Mp 6.86	Post-project	1	Complete	Yes	Upstream

Evaluation level:

1 – initial evaluation conducted one year prior and after barrier correction

2 – conducted on streams where target species did not respond to barrier correction. These evaluations may last as long as two brood cycles or six years for coho salmon.